

RELIGION AND THE GROWTH OF KNOWLEDGE*

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WE live in a time which is characterised by the fact that multitudes are quietly drifting away from the forms of religious belief which satisfied the great majority of a former generation. The growth of knowledge in every direction makes it increasingly difficult to hold to these forms of belief without dishonesty, or even to countenance them by attendance at churches of which the services and creeds embody them. Minor differences in religious belief have ceased to be of general interest. The matters which separate so many from existing churches and creeds go much deeper; and I am one of those who are unable to belong to any existing church.

All existing religious creeds have this in common, that they embody beliefs in miraculous or unintelligible events, even if these events are confined to the past. To our forefathers the occurrence of miraculous events seemed almost an every-day matter. The growth of knowledge and scientific investigation has gradually produced the wide-spread conviction that such events do not occur. It is true that there are many persons who still hold to such beliefs as spiritualism or vitalism—beliefs which imply breaches in the intelligible order of Nature; but the number of those persons is constantly diminishing. It is as one who believes whole-heartedly in the rationality or self-consistency of what is real that I wish to discuss religion.

We may properly call a man's religion, if it is true religion, the philosophy of his life. It embodies the ultimate guiding principles on which he tries to act. He may conform outwardly to traditional religious beliefs; but if he does not make his professed religion the guide of his life it is not religion, but a mere sham. Many of us have ceased to conform, even outwardly, with traditional religious beliefs; and it might seem that for this reason we have no religion, and can at any rate no longer call ourselves Christians. I shall try to show that this is not true: that religious belief is not irrational, but rational belief; and that Christianity is essentially a thoroughly rational belief, so that in proportion as we become rationalists we also become Christians. I shall further try to show that the great

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source of the present weakness in the influence of Christian churches is that they continue to keep in the foreground what are mere accidental accompaniments of Christianity.

I shall now state what seems to me to be the essential element in religious and Christian belief. Religious belief is founded not on any external revelation such as theologians speak of, but simply on our realisation of the true nature of our conscious relations with fellow men and with what we call Nature. In other words it is founded on, or embodies, our own experience. When we consider our own conscious behaviour we find that it is determined not merely by our own individual interests, but also, and to a predominating extent, by those of others. From earliest childhood we all naturally wish to be useful to others; and we all value, and seek to improve upon, our relations to Nature. Neither a child, nor a grown man or woman, is happy without some "job," though sometimes the jobs they find for themselves are rather unfortunate. It is the desire to be useful, or to reach such a degree of efficiency that they can in future be useful, which in the main moves them. The desire to be wanted in our world is part of our nature; and those who attempt to pursue only their own individual interests are simply under an illusion.

The motive of all real scientific investigation is the desire to be of use to fellow men or to get into closer touch with Nature. If there is any reward sought for it is that of having attained these objects. In any other occupation the predominating motive is the same. We are usually satisfied with our respective jobs in proportion as we believe that we are being really useful, although we may aspire to other jobs in which we think that we could be still more useful. In connection with this predominating motive we need not forget that in order to perform our duties efficiently we must, in one way or another, have sufficient individual remuneration. The remuneration must, in some form or other, accompany the duty: otherwise it cannot be carried out.

We find ourselves in a world with what we call duties all around us: also with what we call values of all kinds calling upon us for their preservation and improvement. The duties and values are just there as a matter of experience: it is no theory from outside that reveals them to us. They are part of our nature and that of the environment in which we find ourselves. We perceive the feelings and interests of others just as naturally as we perceive our own feelings and interests. We also perceive and attach value to the beauty and order in the whole of the world of Nature which we find around us.

The matter has another side. Just as we perceive the interests of others as clearly as our own interests, so we perceive that others care for our interests, and that we are dependent on Nature for our maintenance. A child looks unhesitatingly for the loving care and protection of its parents and others; and we all depend on one another and on Nature in a similar way. We take the honesty and reliability of those around us as a matter of course. We do not doubt that on the whole they will do as they would be done by. Were it otherwise all human society would fall into ruin, and all possibility of progress would be at an end. It is not the policemen or judges who make men honest. Against general dishonesty they would be absolutely helpless, even if they were honest themselves. It is just a fact of experience that we can rely, on the whole, on our neighbours and on Nature.

Now what does all this imply? Surely it is that we are more than mere individuals—mere units struggling more or less vainly to do what we imagine is right in a foreign universe? That universe itself is with us in our struggle. To use the language of the Christian religion, God is in us and the persons and things around us, and in so far as we realise this we have no need to fear anything. Individual death is not the death of God who is within us and identified with us. Neither for ourselves nor for others need we fear death, but only the separation from the sight of God which is implied in not trying to play manfully and honourably what we find to be our part.

To many of us language like this will, I know, seem like mere metaphor. But it represents a practical philosophy which has inspired and carried onwards the western world through many generations, and has continued to sustain men through the greatest trials to which they are exposed. This practical philosophy appears to me to be also sound theoretical philosophy when it is freed from mere accidental additions.

To come to objections on the part of what takes itself to be simple common sense, is it not clear that the physical world around us is nothing but a mechanical world, the laws of which have no relation whatever to moral considerations? This, at any rate, seems to be the conclusion to which the study of physics and chemistry leads us.

Now it is true that in what we artificially separate off as physical and chemical phenomena we find little or no sign of anything but blind mechanical behaviour. But physics and chemistry expressly exclude from their consideration all reference to life and conscious activity. In connection with the present discussion this omission is fatal; for it is precisely in connection with the relations

of what we call physical and chemical phenomena to our conscious life that the discussion arises. As a matter of fact, also, we have devised our physical and chemical conceptions for the very purpose of bringing these relations into increasing harmony with social ends. The spring of our physical and chemical knowledge itself has thus been the existence of the relationship between Nature and ourselves.

When we study physics and chemistry in their direct relation to life and conscious activity we are at once brought into contact with this relationship. In biology generally, and very particularly in the study and practice of Medicine and Surgery, we have constantly before us the outstanding fact that Nature, far from being indifferent to human interests, furthers them continuously. The great merit of Hippocrates was that he grasped this principle clearly in its relations to scientific Medicine. He rejected mechanical atomism as an intrusion of philosophy into Medicine; and he may be truly said to have been the founder, not only of scientific Medicine, but also of scientific Biology generally. To him Nature appeared as a healer and a sustainer of life—not as something indifferent to life.

In my books, and on various other previous occasions, I have pointed out that the mechanical conception of Nature breaks down completely when we endeavour to apply it to the relations between living organisms and their environment. This is so, simply because organic or physiological effects cannot be represented as the mere resultants of definite specified causes in the environment. Such a representation is, owing to its incompleteness, quite misleading. The whole life of the organism, including all its various other relations to environment, is always involved in the effect; and the only way in which we can reach scientific clearness about physiological phenomena is by assuming that environment and organism are an organic whole which is constantly tending to maintain, develope, and reproduce itself. This, however, is in reality just what Hippocrates assumed, and what, as it seems to me, every scientific medical practitioner is forced to assume. By mere mechanical or chemical interference from outside we could do nothing to restore the amazingly delicate structure and functional co-ordination of parts of the body which are injured by disease or accident. But Nature is always tending to perform this operation and at the same time to repel infection and other harmful influences. If we study the methods of Nature we are in a position to step in and aid them very essentially. This is the art of the physician or surgeon, which is thus based entirely on the observation of Nature's successes, and the discovery of methods for aiding them.

It is often argued that what we here call Nature is only the resultant action of an immense amount of delicate machinery, evolved as the result of a blind struggle for existence during countless ages. I sometimes wonder whether those who continue to use this argument are capable of thinking at all. If we assume that the living body is a mass of the most delicate machinery, we have also to take into account the fact that in each generation practically the whole of this machinery is scrapped, and then built up again, let alone the fact that it is also at all times being constantly repaired and renewed piecemeal. Are we to suppose that special machinery for effecting the reproduction is concentrated in the nucleus of the germ cell, and supplementary repairing machinery scattered all over the adult body? And what of the next generation? Where is the machinery for making its constructive machinery to come from? The so-called germ-plasm grows and subdivides continuously from generation to generation; but on the mechanical theory of life the germ-plasm is an inconceivably complex and delicately balanced piece of machinery. Are we to suppose that it reproduces itself by a process of fission of all its parts? Imagine the chaos which such a process would produce!

As soon as we picture to ourselves the implications of a mechanical theory of life we cannot avoid seeing the gross absurdity of such a theory. There is not the remotest possibility of its being true. Scientific men still continue to speak of the "mechanism" of heredity and of every vital process. The use of such a mode of expression would be to my mind nothing less than clear evidence of their incapacity for clear thinking if they ever considered, which, to do them justice, they never do, what the meaning of mechanism is. It is only the general ignorance which is reflected in so much of our present popular literature that shields them from the ridicule with which future generations will regard their language.

Perhaps it may seem that though we reject a mechanical theory of life we are still free to hold to the so-called "common sense" mechanistic interpretation of the surrounding physical universe. I wish to point out, as clearly and emphatically as I can, that this is not so. With the mechanistic conception of life the ultimate mechanistic interpretation of the surrounding universe must also go. We can only regard it as a working conception which is sufficient for various practical purposes, but in a deeper sense is quite insufficient. Living organisms are a part of the world of Nature. If we believe that Nature is intelligible, and that there is no such thing as a miracle, the existence of life as a natural phenomenon makes it certain that Nature is no mere mechanical system such as the sciences of physics and chemistry provisionally assume it to be.

The fact that the variegated forms of life have developed gradually during unmeasurable ages serves only to clinch this argument by making it all the more certain that life is actually a natural phenomenon and no miracle. Those who have made for themselves a natural philosophy without taking life into account have made a very great mistake.

The inference that the physical and chemical interpretation of the universe is only a provisional working conception may at first sight appear like throwing doubt on the usefulness of these sciences. This would be absurd. Their usefulness is evident, and is established on a very sure basis. All I mean to imply is that we cannot make their working hypotheses, useful as they are in many directions, the basis of a philosophical theory of the universe. It is true that to former generations it seemed to be only common sense to do so; but the same generations accepted many other things which we can no longer accept. Mechanistic "realism" is not realism at all, but only a quite ideal interpretation of reality.

The next step in my argument is in some ways a more difficult one. We are not mere living organisms, but conscious individuals. I have pointed out what is implied in the fact of mere life; and I must now point out what is implied in the further fact of conscious existence. As already mentioned, the response of a living organism to any stimulus is a response in which the whole life of the organism at any given moment is directly or indirectly concerned; and its responses are of such a nature that its life tends to be actively maintained or reproduced. But otherwise these responses appear to be only immediate responses to immediate stimuli. There is apparently no foresight or retrospection concerned in them. In other words they appear to be intellectually blind responses. Conscious responses are, however, very different.

When we perceive things we perceive at the same time their relations to past and impending events. That is to say, past and impending events are present in perceptions and inseparably bound up with them in an orderly manner, as Kant pointed out. At the same time we perceive them as part of what we are interested in—as related to a system of events which together form an actively maintained whole which constitutes our interests, and corresponds on the wider plane of conscious existence to the actively maintained whole which we call the life of what is regarded as a mere organism. This is an aspect of perception which Kant, in spite of his great contributions to philosophy, did not realise.

When we act consciously our actions are similarly related to past, anticipated, and other present actions, the actions corresponding to perceptions of interest and constituting, with them, a whole

which is maintained and developed. The maintenance of what we perceive as of interest or value sums up the distinctive character of our conscious action, just as, on the lower plane of life, organic maintenance sums up the character of physiological response. It is the fact that conscious existence overleaps separation, not merely in space, but also in time, which distinguishes it. We can look back into a fathomless past, or forward into a fathomless future, as well as out into fathomless space, consciousness and its interests have no bounds. To represent, as Hume did, and various writers still do, a conscious experience as existing merely now has simply no meaning. To represent it as existing here and now within the nerve-cells of a brain is, if possible, still more meaningless.

Let us now examine more closely the nature of interests. They are just the interests which we actually observe as soon as we consider them; and the corresponding values which we attach to the contents of our experience express these interests. As already pointed out, our interests are no mere individual interests, but include the interests of others. We are also interested in and value all the living and active beauty of Nature. We do not lose sight of our individual interests; but the latter, instead of clashing with wider interests, in reality form part of them. The man who sets before himself an ideal of mere individual interest has lost sight of his real interests, and can never be contented with such an ideal; but the man who does not endeavour to realise in his own individual life the ideals which he sets before himself for the lives of others has also lost sight of his real interests.

If it were the case that the maintenance of our interests depended on ourselves alone in face of an indifferent surrounding universe the task before us would be one of Sisyphus, and we should be in a miserable position. We are, however, in no such position. Just as we experience our interests, whether wider or narrower, we also experience the fact that our surrounding universe is with us in the realisation of these interests. We do not need to think of how we are to digest and assimilate our food or regulate our breathing or excretory processes, though if we know something of modern physiology we also know that all these processes must be regulated with the utmost exactitude and delicacy if disaster is to be avoided. Similarly we rely at every turn on others and on surrounding Nature in the realisation of our other interests, however wide. We find ourselves in fellowship with others and with Nature: we are not mere individuals in a foreign environment: our environment itself co-operates with us. Christian charity in our relations with others, and regard for Nature, are the natural outcome of this fact, which implies that our universe is a spiritual universe, not a collection of

mere individuals as such and material things, but one single and supreme spiritual Reality. This is the conception which seems to me to be the foundation of all religion, and particularly of Christianity.

I have already referred to the difference between this conception and that of the physical world. The physical world represents only a blurred and imperfect picture of reality, since it takes no account of the relations between conscious individuals or even living organisms, and their environment. This imperfect picture is, however, very useful and necessary in the absence of detailed knowledge. The atoms and electrons of ordinary physics and chemistry seem simple things at first. It is only when we try in detail to realise how they react with one another, how they can form the basis of life, and how, finally, they are related to conscious existence, that we begin to see how far our simple picture must be from reality. Yet the simple picture is sufficient for many practical purposes, just as the simple picture of a solid foot and solid ground was sufficient for Dr. Johnson when he thought he had refuted idealism by stamping on the ground. For most practical purposes we do not even need to reflect that for modern physics a solid body contains almost nothing that is really solid in Dr. Johnson's sense, since even an atom is no more solid than the immense space included within the orbits of our planetary system.

The distinction between reality and the practically useful pictures of ordinary mechanical or chemical science corresponds, in the language of religion, to the distinction between faith and sight. No distinction is more simple than this; for it is only the distinction between reality and superficial appearance. I wish now to make the distinction as clear as I can, and to free it at the same time from everything that savours of what is supernatural or irrational.

There is nothing more certain in our experience than the existence of conscious life or personality, with all its interests and values. It belongs just as much to our universe as does the appearance of a surrounding world. No less certain is the fellowship or unity between different persons, and between them and Nature. The existence of interests and values is, however, as I have already pointed out, inconsistent with the mechanical conception of things existing separately in space, and events occurring separately in time. Hence that conception can correspond to nothing more than a mere imperfect appearance.

We originate from what we call natural conditions—from germ-cells, food-material, water, and air. Throughout all our lives we are also dependent on natural conditions, as are all the persons

and things which we value. In interpreting these facts we have three alternatives before us; and I will examine them in succession.

The first alternative is to regard natural conditions as simply mechanical conditions, using the word "mechanical" in a wide sense, so as to include all that can be interpreted in terms of ordinary physics and chemistry. I have already pointed out the reasons for dismissing this interpretation without a moments' hesitation, and I shall not waste further words over it. We may leave it to the facile pens of popular writers whose thinking performances are almost negligible.

The second alternative is to regard all the conditions in our environment and that of the germ-cells from which we have developed as being mechanical conditions in the sense already referred to, but to assume that within the living body and living germ-cell an independent influence is at work which guides and controls the mechanical conditions. This, on its purely biological side, is the theory of vitalism, and on its psychical side the theory of a soul which is independent of the body. Roughly speaking, we may say that orthodox theological belief (though not simple Christian belief) has for generations corresponded with this conception, as has also the belief of the majority of men of science. Such men as Descartes, Boyle, and Newton, or Faraday, Kelvin, and Clerk Maxwell, to come nearer to our own times, held substantially this belief, which frankly involves a breach, or rather innumerable breaches, in the intelligibility of the universe. We cannot form any intelligible conception of how a soul and a mechanical process interfere with one another.

The progress of biological, and particularly physiological, knowledge has rendered it progressively more difficult to adhere to such a view. On all sides it has become increasingly more evident that it is impossible to separate bodily from psychical activities and processes. They are inextricably bound up together. From the ethical side there comes what to my mind is an equally strong objection. It is evident that all our passions and instincts, with all that really moves men and women, are the expression of bodily conditions. If these passions and instincts are once regarded as dependent on mechanical conditions the whole of human life is practically degraded to the lowest level. The hypothesis of a soul is then not worth preserving, and at any rate ceases to have any connection with that practical philanthropy which is of the essence of Christianity. Are we also to believe, if we still believe in God, that He created the world as a mechanical system, and then left it, with mankind in the midst of it, to go to ruin as all mechanical arrangements must ultimately go to ruin? Such a God is certainly not

the God of Christianity. The old heathen gods, eccentric as they might be, were on a higher ethical level. A world of machinery would be spiritual asphyxiation.

I now come to the third alternative, which is that only on partial and superficial examination does the visible world seem to be mechanical; the real world—that world which faith reveals to us—is spiritual. This is the only conclusion I can come to; and to my mind it is the only possible rational conclusion. As life and personality form part of our universe, and as all we know of it is through conscious perception, it is quite impossible to draw any valid general conclusions about it without taking life and conscious perception into account. We might as well leave electro-magnetic phenomena out of account, though in this case the omission would hardly be as serious. I have already pointed out the profound modifications in our view of physical and chemical conceptions which become necessary when we take life into account. Mechanical interpretation is seen to be quite inadequate. But when we also take conscious perception into account a still more radical change in interpretation becomes unavoidable unless we are to admit that our world is inconsistent with itself, and therefore unintelligible.

The world as perceived is a world of actively maintained interests and values, in which, as already pointed out, the past and future participate without limit, as well as the present. These interests and values are, moreover, no mere individual interests and values. We participate in them, but we also find that apart from our individual activities they are active in our world of perception and give abiding unity to it both in space and time. They are objective, and not merely subjective values. The perceived world acts in accordance with them. We trace them in history and in individual development from childhood. When we lose sight of them in early infancy or in early stages of history we have no right to say that they are no longer there: only that we cannot trace them except by faith, which is simply another word for reason. How much is hidden from us in the real existence of an ovum or cell-nucleus or atom we can only infer from the behaviour of the developed organism and the atoms in it, and from our faith in the consistency of reality. The atoms in us participate in that unity of time and space which constitutes spiritual existence. If we knew all of what an atom is we should know all of what our spiritual universe is.

Our world can only be a spiritual world. It is also one spiritual world: for there is no meaning in assuming the existence of any other world outside of what we can perceive or infer. This conclusion is just the same as the religious conception that the world is

the manifestation of one God in spite of all superficial appearances. We must, however, remove from our mind the idea that this implies anything miraculous or unintelligible. It only expresses the nature of reality itself, so that the religious conception of reality might properly be called a naturalistic conception, and leaves the fullest play to interpretation on what may be called naturalistic, though not mechanistic, lines.

In connection with medical study and practice we are constantly in contact with phenomena which show in the clearest manner what we call the dependence of mind upon body. We know that even the highest moral or spiritual characters are dependent on bodily function and on hereditary transmission through germ-cells. We also know that in helping the healing of the body we are helping the healing of the mind. Christian philanthropists also realise now, as in a former generation they failed to realise, that ills of the body are the key to ills of the soul. When we regard what we call the body and the physical environment as no less the expression of spiritual reality than what we call the mind the connection between body or external environment and mind no longer leads us towards a mechanistic or materialistic conception which degrades us in the scale of being. We can also still regard Nature as our poets and artists have regarded her, though for certain immediately practical purposes we regard her from the unreal physical standpoint of an engineer.

The conception which I have tried to present of religious or general philosophical belief seems to me to be in accordance with all that is essential in the original teaching of Christianity, but is free from any element that implies a breach in the order of existence. In other words it is a strictly rational form of Christianity which I have been trying to expound, and a form in which no conflict arises between the general advance of knowledge and religious belief. Conflict does arise, however, and conflict in which there is no room for compromise, when a particular branch of science usurps for itself the position of a philosophy.

When he wrote the *Principia* Newton thought that he was describing reality itself, and not merely a practically useful method of regarding reality. He accordingly applied the word "philosophy" to the main principles he laid down; and the rest of the Western world, including the theologians, agreed with him in this. We are still steeped in the tradition of what was called the Newtonian philosophy. So natural does it seem to us that without philosophical training we do not even suspect that in describing our experience as of physical reality we are making any assumption at all. The consequence has been the spread of materialism in one form or an-

other. Existing orthodox theology seems to me to be full of it, and with the complementary handicap of a variety of beliefs in miraculous events. I need hardly point out that the conception sketched out in this paper is inconsistent with the so-called philosophy of Newton, however great were the advances which he made in physics. Neither physics, nor any other special branch of knowledge, is philosophy. Philosophy, or religion, takes into account experience as a whole, and not merely, as physics does, a very limited aspect of it.

Newton was, of course, no materialist, but he was only saved from materialism by his unquestioning belief in miraculous events; and the theologians and others who have accepted his physical philosophy are in the same position. It is no wonder that so many who have found that the evidence for the miraculous events has come to appear quite unsatisfactory, and who also accept Newton's identification of the physical working conception of reality with reality itself, have become simple and straight forward materialists. To them materialism has come to seem the only honest form of belief.

I am not one of those who think that the waning influence of orthodox theology implies any real decay in practical religious belief. It seems to me that men are everywhere seeking for some mode of honest expression for the religious faith that is in them, but are to a constantly increasing extent repelled by present orthodox theology, as well as by the intellectual shortcomings, or doubtful intellectual sincerity, of part of the clergy. These may seem hard things to say, but I feel that they ought to be said very plainly; and it is as a Christian whom orthodox theology has driven outside any existing Christian church, but who believes whole-heartedly in the supreme importance of what Christian churches really stand for in calling us back from the appearances of sense to spiritual reality, that I say them. If Christian churches are to retain and increase their influence at home, and spread that influence over all the world, they must, it seems to me, remodel their theology on simple Christian lines, casting out from it its materialism with the complementary belief in the miraculous, and laying more emphasis on essentials.

A mere discarding of the miraculous would be worse than useless. It would leave no religion at all. The very basis of religion is the fact that this universe is a spiritual universe; that God is in us all and everywhere around us, and is not a far-away shadowy being. This is the essence of the Gospel which Jesus proclaimed; and a church which did not teach and act upon that Gospel would soon disappear. It is not a gospel of rest and ease, but calls us to action in whatever position we may be; for it is only in action that we can realise our oneness with our fellow men and with Nature,

and in so doing realise our oneness with God. It calls us to do our duty actively and confidently, but charitably, to realise that our neighbours are actually our neighbours, and to keep their interests always in mind: to see to our country's proper government and to fight in its just battles. It calls us also to trust to reason and the fullest investigation of everything, because it is itself a gospel of reason, and not based on any sort or kind of external authority or unreasoning belief.

Such is at any rate my own conception of Christianity; and though I belong to no Christian Church, I still count myself a Christian and believe that Christianity will yet conquer the world.

NOTES BY THE WAY.

No. 11.

A League of Knowledge.

"Reality (Spinoza said) is that which explains itself and needs nothing else to explain it." Should a time ever come when the total fact of the universe stood solidly before us, completely discovered, it would instantly explain itself, and so relieve us at a stroke from all our philosophical botherations. The explanation of the universe is not outside it, but inside it. It would be more in accordance with the reality of things, and more modest on our part, if we were to say that the task of thought is rather to discover the universe than to explain it. Such a mode of statement has many advantages. One is that it would establish a more friendly relation between Science, Philosophy, and Religion. Instead of regarding these three as rival claimants for the explanation of the universe, we should then regard them as partners in its discovery. They would meet on the ground of common modesty. Each of the three, by frankly admitting that the fact before it was not the whole universe, but the merest fragment of it, would be in a mood to combine its efforts with the other two for enlarging that fragment into something more significant and more satisfactory. A change would then take place very similar to that which many of us are now desiring in the affairs of civilisation. The field of knowledge, instead of being broken up into rival empires, each making a preposterous claim to the hegemony of truth, would become an organism of federated powers, a league of spiritual nations, engaged together in the co-operative task of discovering the facts. Facts are highly mysterious things—that is perhaps why they are so stubborn. It will task the united resources of science, philosophy, and religion to explore the mystery which lies hidden in the humblest of them.

—L. P. JACKS, in the *Atlantic Monthly*.

IMMANUEL KANT, 1734-1804

THE MAN, HIS WORK AND THOUGHT.

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THE name and fame of Immanuel Kant are far sounded. One meets references to him in works on philosophy and religion, sociology, political science and economics, psychology, psychotherapy, biology and education, astronomy and physics. Essayists, novelists and poets, military leaders, politicians, and publicists have come within the range of his influence. Even to-day he is far from being a spent force. He still stands on the great high road of thought as a living guide to wayfaring thinkers who require knowledge of the pathway to reality. His thought-creations ramify right through our modern systems. When the form and setting of his thought-renewing or thought-destroying ideas have been put aside,—he was merely in this feature a child of his time,—the great central ideas of his Critiques spring up as from wells of living water to nourish and sustain the inner core of modern philosophy. The divers systems of the day draw in varying measures from him as a source or fountain head.

During this year the bi-centenary of the birth of Kant has been fittingly celebrated by Universities and learned societies in various countries. Immanuel Kant was born in Koenigsberg on April 22nd, 1724. He spent the whole of his life within the confines of the province and the city, and died there on February 12th, 1804. The religious atmosphere of his home environment during boyhood remained with him as an imperishable influence. In the quietude of their pietist home, the devotional life of his parents made him responsive to the demands of morality and religion. The presence of God was real to them, and the wonderment of the moral life, as lived for its own sake by these Christian folk, held Kant spellbound from youth to old age. He said that they had "the root of the matter in them." "They possessed the highest good which man can enjoy, that calm, that serenity, that inward peace which is not disturbed by passion." They lived indeed the moral life which philosophers seek to interpret and explain. It is one thing to live well in the sight of God; it is another thing to theorise about it. Kant ever appreciated the distinction. His own early home training in morality and religion enabled him to note fundamental differences in value between intellectualism and piety, mere knowledge and the radiant serenity of the moral life in which the golden rule was pre-eminent. So he became more and more convinced that the moral life, in

which duties are fulfilled as divine commands, is the greatest achievement possible to the human personality. The whole man counts as a whole in the moral valuation of life. Though Kant grew immensely in intellectual stature, he never lost hold on the eternal truth that the inner light of right living as ever in the presence of the Almighty shone as ineffably in the heart of the lowliest of the children of earth as in that of the highest. Morality in principle is not a mere outgrowth of intellectualism: it is not the resultant of refining or organising native instinctive trends: it is rather the original spring of human life itself which shines by its own light, and is understood of all men whose persons are mentally whole. Growth in the moral life is not due to influences which originate in amoral instincts or amoral emotions; it does not arise out of merely physical conditions; it springs from a source that is in itself moral. In morality, as Kant understood it, the "commonest intelligence can easily and without hesitation see what, on the principle of autonomy of the will, requires to be done."¹ "It is," as he says again, "always in everyone's power to satisfy the categorical commands of morality." At the close of his great Critique he affirmed that, "in matters which concern all men without distinction nature cannot be accused of any partial distribution of her gifts; and that with regard to the essential interests of human nature, the highest philosophy can achieve no more than that guidance which nature has vouchsafed even to the meanest understanding."² The experiences which these words imply, Kant had at first hand. He knew them as exemplified in the life of his mother, whose death when he was thirteen years old, was an irreparable loss to him. The memory of her was as a living presence to him. His father died nine years later. From early manhood he had to rely entirely upon himself, and, having resolved upon a scholastic career, was compelled to eke out a living from the slenderest of resources.

Through the influence of F. A. Schultz, his mother's pastor and friend, Kant was enabled to attend the High School of the City and afterwards the University. In size the University would compare with the smaller Universities in Australia. The population in Königsberg was about the same as that of Hobart to-day. At the University he became much attached to Martin Knutzen, the Professor of Logic and Metaphysics, who inducted him into the Wolffian philosophy (which treated of possibility rather than actuality), and the natural philosophy of Newton. In addition to philosophy and physics, Kant was an earnest student of Latin literature. At one time he had visions of being a philologist. After graduating, Kant earned his living as a private tutor until 1755, when he was appointed lecturer in the University, but it was not till 1770 that he

attained the chair of Logic and Metaphysics. He carried out the duties of the professorship until 1799, when his strength failed him. He twice declined tempting offers to go elsewhere, being determined never to leave Königsberg.

Kant early rose to fame as a Lecturer. While holding the minor position in the University, his public classes were attended by men of distinction. The number of students in his private classes were sometimes more than twenty and sometimes less. In keeping with the practice of the times he used a text book. For him it served as a starting point for critical treatment, and for the elucidation and expansion of his own thoughts. He ever sought to lead his students to independent thinking. They were there not to learn philosophy out of books but to philosophise. He desired that they should become leaders of thought, persistent inquirers into truth, relentless critics of shams and one-eyed assertions. They should constantly examine their own conclusions in the light of the opinion and criticism of others. His style in lecturing was in marked contrast to his style in writing. It was characterised by vivacity and directness, clear ringing periods, apt quotations, and extended improvisations which in simple diction unfolded the inner heart of the doctrines he was enunciating.

Herder has left on record his impressions of Kant as a teacher, which are widely quoted:—"I have had the good fortune to know a philosopher who was my teacher; he had the happy sprightliness of a youth, and this I believe he retained even in old age. His open, thoughtful brow was the seat of unruffled calmness and joy; discourse full of thought flowed from his lips; jest and wit and humour were at his command; and his lecture was the most entertaining conversation. With the same genius with which he criticised Leibniz, Wolff, Crusius, Hume, and expounded the laws of Newton and Kepler, he would also take up the writings of Rousseau, or any recent discovery in nature, give his estimate of them, and come back again to the knowledge of nature and to the moral worth of man. Natural history, natural philosophy, the history of nations and human nature, mathematics, and experience—these were the sources from which he enlivened his lecture and his conversation. Nothing worth knowing was indifferent to him; no party, no sect, no desire of fame or profit had the smallest charm for him compared with the advancement and elucidation of the truth. He encouraged and urged to independent thought, and was far from wishing to dominate. This man, whom I name with the greatest gratitude and reverence, is Immanuel Kant; his image stands pleasantly before me."

In his writings, on the other hand, Kant does not afford the same pleasures to the reader, except perhaps in his earlier and minor works, or on those later occasions when he rises to heights of poetic splendour, as, for instance, his panegyric to duty; his polemic outbursts against sacerdotal despotism, and his adoration for the moral law and the starry heavens. "In the main treatise," as Paulsen³ says, "a dry style of indefatigable and inexorable didactics everywhere prevails." Still, in view of the downright earnestness of Kant and his teachings, his unresting endeavour to set forth the truth as he sees it, though with "detailed exactitude," the endless richness of the contents, and the simplicity and inspirational uplift of the doctrines themselves when shorn of the scholastic formalism

of their setting, the student is well paid for his efforts in mastering the foundations of the Critical Philosophy. There is nothing worthy of achievement without enthusiasm, as Kant himself has said.

Physically Kant was frail; he was of small stature, and suffered the ill-effects of a sunken chest. But in his mental control of bodily weakness and the dominance of a cheerful spirit, as well as assiduous attention to regularity in daily living, he exemplified the modern therapeutics of mental hygiene. If it were not for his social and genial personality, especially considering his early struggles with poverty and a weakened bodily frame, Kant would not have been enabled to attain an enduring glory, for his greatest achievement came late in life after a long period of incubation; nor would he have been able to stand the excessive strain of enormous mental activity after he had attained 60 years of age. Owing to the commonly prevailing attitude towards Kant's personality one would scarcely look for any enthusiasm in him. Heine has left a picture which has almost falsified him for all time. He is so often thought of as a mere "grosses Denkorgan," a thinking machine, regulating his daily life in accordance with a rigid routine which must be punctiliously observed to the very letter. Assuming that he must necessarily have dedicated his life to pure reason, many have regarded him as being a man of icy indifference to the concerns of ordinary mortals, passing his days with an unruffled monastic monotony. But Kant was truly a man of the world. He lived among men and was a most engaging personality. In an interesting article by Schoendoerffer⁴ entitled, "*Der Elegante Magister*," the charm of Kant's personality is devotedly portrayed. Kant was an enthusiast in life. We would even repeat his saying:—"Without enthusiasm nothing great is ever achieved in this world."⁵ He bent himself resolutely to the task of overcoming the greatest difficulties, and his determination to endure a long want of recognition for a higher appointment is worthy of record. To his students he was a warm-hearted friend, aiding them in many kindly ways that only an ardent thoughtful nature could discover. He could unite in his person the deepest knowledge with wonderful urbanity and simplicity of mind, and however earnestly he might be engaged in wrestling with the problems of speculative philosophy, he could throw himself eagerly in due season into hearty good fellowship with his comrades in life. Hamann records the fact that in 1764 Kant was caught up in a whirl of social pleasures, and he feared they would prevent Kant from completing the thinking work he had in his head. But, as it is well known, Kant never neglected his duties. By thus entering heartily, in his pre-critical period especially, into the everyday

life of his fellows, he combated successfully an incipient hypochondriacal trend and freed himself altogether from a possible morbid introspection. He was by no means a recluse; he enjoyed the society of business men and public officials. His meal times were ever a source of delight to him. But in public administration he took little or no active part, though he followed with intense interest the great political and social movements of his time, such as the French and American Revolutions, and wholeheartedly hoped for a "federal league of nations" which would bring about Perpetual Peace. He combined the patriotic spirit with the cosmopolitan, as Delbos says.⁶ World liberty for him was not worth while without due recognition of constituted authority in one's own state. His life in the main was that of the scholar, working out his ideas in the quietude of the study, preserving his strength for such service, as being in humanity's cause. He was distinctly a man of contemplative turn of mind. He was not what we call the man of action. It was not his wont to formulate and carry out a programme in public disputations; nor did he delight actively to participate in public affairs. He had settled for himself his own life in his own way. He was truly a man of dominant will, having purposed a course of life most suitable for the effective realisation of his ideas, which were to be his contribution to the service of mankind.

And, if we say that his life was an embodiment of his own doctrines, let us think of it rather in terms of the great issues he was concerned with than in terms of incidents which have not the root of the matter in them. In his daily doings he united liberty and law; certainly not as most other men would in the regulation of the minor details of life; but then it was his way. And do we not to-day emphasize the importance of individual differences? It is not the outward seeming of another's life, however ennobled, that we should respect so much as the ruling principles that guide it to the attainment of the highest. Kant was above all a man in whom principles of rational origin were uppermost. He was a child of the *Aufklärung* and in the conduct of the understanding, illumined from within, he followed out the rules of the game of life, without the help of the visible authority of an ecclesiastical order, exemplified in the church of his day. He gave to the world a new lead in the way of moral thought. He stood for the independent worth of every man. He pleaded for the recognition of the lowly in heart who were honourable in service. He exalted the dignity of human life with such an impassioned seriousness that led Schiller, with some measure of criticism to call him the "Draco of his time." Schopenhauer affirmed that his greatest service to morality was that he purified it of all eudaemonism. In rooting moral faith in the

good will Paulsen asserts that Kant teaches definitive truth. By freeing his mind from the distractions of the times in public affairs, he was enabled to set forth the great foundational truths of faith that secure men in the reality of religion and morality against the onslaught of materialism and scepticism. He had in him something of the Hebrew's passion for wisdom and righteousness and "placed the end of the creation in the glory of God." He endeavoured to follow fearlessly the inner light of reason, seek faithfully with his own understanding for what is the truth and declare it (*Sapere aude*)⁷, do diligently the commands of the moral law, and walk humbly before God and man.

It is usual to divide Kant's philosophical development into the main periods,—the pre-critical, the empirical, and the critical.

In the pre-critical or early period his writings were mainly concerned with the natural sciences from the Newtonian standpoint, but at the same time he had not altogether disengaged himself from the meshes of the dogmatic rationalism of the Wolffian system. His most interesting work of this period is the *Universal Natural History and Theory of the Heavens*⁸ in which he anticipated the nebular theory of Laplace. It is a delightful book to read, and has been accorded high praise by Kelvin, Tait, Huxley, Newcomb, and others.

During the empirical period Kant broke away from the leading strings of the dogmatists, and found himself in the company of Hume, Voltaire, and Rousseau. He became estranged from the metaphysics of the schools. He affirmed, as he did all through, that existence could not be derived from merely thinking the possible. He realised the difference between a logical ground for causation, such as the principle of sufficient reason, and a real ground which must concern itself with actual or particular facts. The explanation of the relation of cause and effect from the standpoint of observation of events is not to be derived from a mere analysis of the concepts. We must go to experience for an answer. As Ward⁹ says, "the *vera causa* of Newton will not rhyme with the vernünftige Gedanken of Wolff. Existence is not a predicate and cannot be reached by mere thought." These truths were clearly realised by Kant at the time, and undoubtedly forced upon him by his own immediate interest in the sciences. The prevailing proofs of God's existence were so devoid of appreciation of what belongs to the province of scientific demonstration (as Kant showed), that we may well assume that he was led to the question of defining the boundaries of experience of the real and "experience" of the "ideal" as an inward development of his own progress in philosophical thought. The influence of the English empiricists and their French successors no doubt made an effective impression upon Kant (as he himself

admits), but they were rather "sparks" that fanned his slumbering thoughts into clearer light. At all events, though he certainly appreciated the force of the empirical standpoint, he was not carried away with it. He still held to the position that the reality of concepts must be justified on other grounds than the mere possibility of thinking them, and that, though they cannot originate from perceptual experience, they were not thereby dissolved or cast utterly beyond the bounds of knowledge, and merely allowed a ghostly recognition as a fiction of the mind.

The chief works of this period are,—The only Possible Ground for a Demonstration of the Existence of God, Inquiry into the Clearness of the Principles of Natural Theology and Morals, Attempt to introduce into Philosophy the Conception of Negative Magnitudes, Observations on the Feelings of the Beautiful and the Sublime, and Dreams of a Ghost Seer.

The third period is the critical. It opened with the famous Dissertation on the Form and Principles of the Sensible and the Intelligible World, delivered in 1770 on the occasion of his appointment as professor. After the passing of eleven years of "silence," the Critique of Pure Reason was published in 1781, when he was fifty-seven years of age. From thence on his works appeared in rapid succession, the Prolegomena, the Critique of Practical Reason, the Critique of Judgment, Religion within the Limits of Pure Reason, the Metaphysics of Morals, and other works on Everlasting Peace, Anthropology, Logic, Physical Geography, Pedagogy, as well as various posthumous remains, some of which have only recently been published.

The pronouncement of the Dissertation marked the most outstanding "change-over" in Kant's views. By then he had won his way to an assured position in his thinking, from the general trend of which he never again wandered. This transformation from the faltering attitude of inquiry to the emphasis and resolution of assured conviction has occasioned intensive investigation into the influences upon Kant at the time. They are still being discussed. Kant's own references to his philosophical relations with Hume made the question of the influences a live issue. Hume had put his finger up on some of the weak spots of the speculations of the time, but he did not remove them. Existence cannot add to the significance of the idea or concept as isolated in consciousness, as he pointed out, but he failed to realise the integral or objective functioning of concepts in reality. Knowledge does indeed begin with experience, but it does not wholly arise from the experience of particular or detached sense-data. And further, the "celebrated David Hume," as Kant calls him, was one of those "geographers of human

reason" who supposed that questions relating to what transcended the limits of sense-experience were beyond the frontiers of knowledge. Kant valued the work of the sceptic in so far as he forced reason to make for itself a "resting place where it may reflect for a time on its dogmatical wanderings, and gain a survey of the region where it happens to be, in order to choose its way with greater certainty for the future." Kant determined to find the point at which Hume parted from the "right track of truth," and eventually realised the logical impasse of the Locke-Humian originals of knowledge; and in the light of his own inner development, with its varying phases, he sought to unravel the problem in such a way as would (he hoped) lead to a satisfactory solution. Accordingly, when at last his mind was made up, the Dissertation came forth.

The main feature of the Dissertation is, as its title indicates, that there is a fundamental distinction between the sensible and the supersensible worlds. The things of sense appear as presentations in consciousness and are conditioned by space and time. Being appearances Kant gave them the Platonic name of phenomena. In contrast to them there are noumena, or concepts of the understanding, which cannot be perceptualised. They are not in themselves representable under space-time determinations. The sensibility of itself is the capacity to receive impressions; it is merely receptive. Intelligence, on the other hand, is integrative. In one aspect of its functioning, it unifies or combines the sense-objects in various elaborations and so constitutes what is known as sense-experience or empirical knowledge,—i.e., knowledge of particular matters of fact. But intelligence has also a higher function. It is concerned with concepts of its own, different in kind from percepts, for there are no sense-objects to which they may be conformed. Here intelligence is pure; it operates "apart" from the matter of sense-determinations. It inducts us into a world of pure ideas. We may conceive of the mutual interrelatedness of all things, with God as eternal ground. We may think of the world as a unity, but we cannot represent it as such in perception. We may think of the subject or self as a creative principle, capable of setting up in idea the world of knowledge as in formal completeness, and as a moral agent, capable of conceiving an ideal of conduct the realisation of which may never actually be. These ideas of reason cannot be sensed. Here there is a fundamental difference between perception and conception. They do not imply variations in degree, as Leibniz taught; they refer to different spheres of thought. But of the world of ideas we have no positive or demonstrable knowledge. Kant did not, it should be mentioned, get as far as this in the Dissertation. He there aspired to a metaphysical justification of the intelligible world, but this ex-

pectation rather hastily given, as he himself averred, was eventually dissipated as he worked on towards the consummate achievement of the Critique of Pure Reason.

The main trends of the Critique have been given in outline in the Monograph series, No. 3, and need not be repeated here. It may be fitting now to present in brief Kant's leading moral ideas,—the self-active subject, moral law and duty, immortality and God.

Freedom or the self-activity of the subject.—In his great endeavour Kant strove to limit knowledge (the positive knowledge of the sciences) to make room for faith (the practical knowledge of human values in morality and religion). The keystone of Kant's philosophical system was the fact of freedom, which rooted itself, more deeply and securely than Kant himself admitted, in what Ward calls "Kant's central truth," the synthetic unity of apperception or the principle of self-consciousness.

"Objective experience structurally regarded is," as he pointed out, from end to end a synthesis of what he termed "a manifold." "This synthesising or intergrating process is begun at the lower or perceptual level of experience and continued at the higher or intellectual level, solely by the interested, the living activity of the experient subject itself."¹⁰ Freedom for Kant was the original or spontaneous activity of the subject, and without its acceptance as a fact all that is cherished of value in human life and institutions, and all that is hoped for hereafter, are things of nought. This supreme principle is at the basis of the whole of Kant's practical philosophy, and as a crimson thread links up all he has to say on morality, religion and education, history and law.

Moral Law and Duty.—Freedom is inextricably one with the moral ought. That, too, is a fact of independent value. It cannot be distilled from the sensible world which is of a lower order, nor can it be dissolved into simpler elements, nor does it arise out of non-moral facts. We cannot derive our consciousness of moral law through the mediation of sense-experience. It is intuitively known, and that too, by the commonest understanding. It requires no training in intellectual gymnastics to realise its potency and reality. It is there in man from the beginning. His supreme task is to give it complete expression, to free himself from the limits of the world of sense by enthroning it as the law of his life. A man may resist the moral law, but he cannot eradicate it. Though disowned, it still operates; and it finally comes into judgment against him who attempts to put it aside. The moral law is not something given by man, not something that he comes to know, that he may add to his nature. It is his nature, if he have regard to himself as originally self-determining. In other words, the moral law is a factum of pure

reason; an original element in a man's being, which the meanest intelligence can grasp and appreciate. The modern study of human endowments as represented by neural and psychical dispositions, the instinctive tendencies, the primary emotions, and the temperaments, certainly aids us towards a clearer understanding of the moral development of the individual from the early beginnings of his life,—and what Kant lacked more than ought else was an adequate appreciation of, and investigation into, the psychology of the human mind as something which grows; but the operations must presuppose the morally determining subject. They unfold as it were what the moral self “feeds on,” and how it finds an outlet in fruition.

Man stands, as Kant says, under a “discipline of reason.” But the discipline should surely carry with it an intrinsic satisfaction and a feeling of enjoyment in its service. Fulfilment of duty must have something satisfying about it, even though it be but the grim determination to go on unflinchingly. The consciousness of un-deviating loyalty to what is revealed as the highest, and of un-resting endeavour to attain it, reinforces the self in its striving, adds new impetus to it and gives one the satisfaction of having stood one's ground and done one's allotted task. There is something of moral grandeur in the life devoted to duty, as Kant insists. Greatness in personality is not the prerogative of the favourites of fortune; it is within reach of even the humblest. Stand true to oneself; realise that one is free and self-dependent; that even though all else fail, yet one has it in oneself to be sublime, to claim respect, to be at home with oneself, aye, and against the world! This consciousness of “well done” is truly “the effect of a respect for something quite different from life, something in comparison and contrast with which life and all its enjoyment has no value.”¹¹

Immortality and God.—The outstanding ideas which Kant ever associated with duty and freedom as being inalienable from man's moral heritage are Immortality and God. They were directly related to the third great question which reason raises, viz.—What may I hope for? (The other two being, What can I know? and What shall I do?) The consideration of this question by Kant is never separated from the fact of moral determination. It is only raised with respect to the will that is determined to action by the moral law. Grant that a man fulfils the law in his person as an autonomous being, What may he hope for? The raising of this question is not a mere beckoning for a reward for good conduct; but it is a demand on man's part for the achievement of what is morally possible for him. Morality must have a final end or highest good in which man may find ultimate satisfaction. To realise

such an end is an obligation which moral reason imposes upon man, and the ideas of God and a future life cannot be separated from such obligation.

Man's claim to immortality rests upon the fact that he is a moral being; that every man has something in him, which is worthy of preservation, and of ultimate purification. And so the point is, what rational guarantee has man that his moral progress implicates an eternal hope? If he can only advance from good to better, is it ever possible for him to attain the best? This is a pressing question in view of the fact that the best is not reachable by him under existing conditions. Is it to be absolutely foreclosed to him? Kant's answer is that the highest good is possible for man. He may not actually fulfil it, for circumstances beyond his control may hinder him; but if there be in him the sincere and pure-hearted disposition to attain, a downright persistent effort to succeed, and a recognition that he does not contend alone with the principalities and powers of evil that oppose him, he can rest assured that he cannot fail, for there is a Being who is supreme above all, "eternal in the heavens," who knows him through and through and intuitively his progress in the moral life as a whole from the beginning. While, then, from man's finite point of view, persistency in moral endeavour is the rule of his life, yet his worth is not determined by what he has already attained, but also by what he is on the way to attain, and is within measurable hope of attaining. But without faith that man's life in fulness transcends this bourne of time and place, morality would become a despairing torment to him whose soul aspires upwards to this infinite.

Kant's argument for immortality has a close relation to the common feelings of humanity. It would have been more satisfactory had he been enabled to use the emotional side of our human nature even to better purpose than he did, but his theoretical philosophy prevented him. We feel intimately that death cannot end all; our higher feelings revolt at such a thought. These emotions do not arise "out of the mere sense of loss, but out of a consciousness of reason baffled and spiritual ideals mocked."¹² The righteous man has an ideal which the world of mechanism cannot respect nor understand. He has in his moral purposes transcended the limits of that world, and a sure faith in God would claim for him the right to go on,—not as permitting the mere continuance of living itself, but as presenting greater opportunities for service, and for the completion of purposes. Annihilation would put an end to all exalted striving, if there were no possibility of a future life. The conviction is deeply rooted in man's being, and no ethical system would be complete without finding a place for it. And Kant was not far out

after all in associating the immortality of the soul with man's need for moral development, for the consummation of his life in a holy and blessed existence.

Kant's conception of God reached its highest expression in the *Critique of Judgment* and the *Religion within the Limits of Pure Reason*. He had an impassioned belief in the existence of God. The marvellous and limitless order of the universe without and the intrinsic worth of the moral self within both necessitated for him a theistic faith. The outstanding feature of his argument for the existence of God is its ethical starting-point. Kant discarded the physical side altogether and considered the moral order in its entire independence. The moral law exists in its own right and commands categorically. The appeal is to immediate experience in conscience. But the fulfilment of the moral law extends beyond the law itself as the determining principle of the will, and the will is confronted with the fact of striving towards an ideal or moral end. And the problem arises,—How is the final end of morality to be realised? This end is the highest good in the world possible through freedom. Now the possibility of the summum bonum implies a principle of harmony between nature and morality. Kant endeavours to reconcile them through teleology. The world of nature implies purposiveness: as a whole it cannot be explained by mechanism, i.e., according to the law of natural causality, which applies to a world of things in externality from one another. But if we ask—What are things there for? we require a different kind of causality to account for them. In this respect we must think of them as expressing a unity for an intelligence that is not discursive as ours is. From this point of view it appears possible to conceive a supersensible substrate for the world of nature as a whole; but we cannot “demonstrate” any object to which such a conception will correspond, i.e., we cannot state the idea as a fact of knowledge. This higher unity of nature and its laws according to purpose can only be accounted for on the assumption of a designedly-constructive causality. Accordingly the supersensible ground of nature brings the world of sense into harmony with the conception of freedom. Thus a common principle may be said to obtain between nature and freedom,—and so with morality. It may then be possible for nature to express a final purpose as having meaning for the moral personality of man. Assuming the adaptability of nature to moral purposes, or the ends of freedom, it is also possible to assume a moral world-cause or God as the ultimate ground of the “possibility of the unification of nature with its inner ethical laws.” But Kant further insists that the moral argument can in no wise be regarded as dependent upon the physical order. It would preserve all its

strength, even if from that order there could not be inferred any ground for an intelligent cause, for it would find in the "concept of freedom, and in the moral ideas founded thereon, a practically sufficient ground for postulating the concept of an original Being in conformity with these, i.e., as a Deity and for postulating nature as a final purpose in accordance with freedom and its laws."¹³

Putting aside criticism of Kant's conception of teleology and theology (which require ampler treatment than is accorded them here), we would say that Kant was on the right track; only his excessive regard for the tenets of the Critique of Pure Reason prevented him from fulfilling the higher purposes he had in view in his later Critiques and the "Religion." There he had visions of a moral order or kingdom in which God was supreme as its law-giver . . . benevolent governor, and righteous judge. Man should fulfil the moral laws as though they were the commands of the divine Searcher of all hearts. Man's worship was an inward service of the mind, rooted in moral obligation, and far removed from the mere outward observance of religious conformity, and dissociated from any priestly mediation. When Kant let himself go and cut adrift from his theoretical moorings, we find him setting up the conception of the highest good as an ethical commonwealth, wherein each and all work for the common good of all, and unite in overcoming everything which tends towards disintegration. The moral law is paramount; each fulfils it unconditionally. And, as this ethical supremacy of law necessitates a joint working out of a higher order of society, which is completely under moral laws, and in which virtue obtains in its plenitude and happiness is enjoyed by each and all, a common good thus possesses the souls of men. It is, as Kant calls it, a duty *sui generis* (Pflicht von ihrer eignen Art), one owed by the whole human race to itself; for the highest good of mankind is not merely something to be participated in by individuals as such, but is a common good through which the best in each comes to fruition in the common happiness of all. Each member of the commonwealth of good works along paths that converge towards the supreme ideal, which makes itself felt in every one and is the "grand passion" of every one's life. Its consummation is not possible, where each looks merely to his own things, and not to the things of others. As Kant says,—“The highest moral good is not realisable only through the striving of particular individuals each for his own moral perfection, but demands for its realisation a union of these same persons as a whole in which and through the unity of which, it alone can be brought about. But the idea of such a whole as a universal commonwealth under moral laws is an idea totally different from all other moral laws (which concern only what

we know to be in our power), viz.,—to aim at a whole the realisation of which we do not know whether it be in our power or no. This then is a duty different from all others, both in kind and in principle.”¹⁴ Thus each man must act with the undivided strength of his own person and in undivided union with all his fellows. What Herbart has applied to the individual, we would apply also to him as one of a whole acting as a whole. “In all we do and strive for, in the lowest as well as in the highest, we are even metaphysically regarded), in every instance, a whole. In the worst as well as in the best, what we achieve, we achieve as a whole. And this is just because there can be, on our part, no separation, no partition, and no alienation of our being.”¹⁵ Thus each man must go ahead in his moral task as if all depended upon his own initiative, yet withal remembering the while that he is not alone; for Another is with him, and he a greater than man. Here then we realise a complete community of moral interests, and a freedom to unfold our personality in fulness. And, as the whole is based upon universal moral legislation, thus the highest good may truly be said to root itself in the moral law.

NOTES.—1. C. Pract. R. (Abbott), p. 126. 2. C. Pure R. (Müller), v. 2. p. 713. 3. Paulsen. Immanuel Kant, p. 70. 4. In Reichs philosophischer Almanach, 1924: Immanuel Kant zum Gedächtnis, pp. 65-86. 5. Werke; ed. Hartenstein, v. 2, p. 221. 6. Delbos. La Philosophie pratique de Kant, p. 44. 7. Werke; ed. Hartenstein, v. 4, p. 161. 8. Tr. by Hastie as Kant's Cosmogony, 1900. 9. Immanuel Kant (Hertz lecture), 1922, p. 8. 10. Ward. Study of Kant, p. 80. 11. C. Pract. R. (Abbott), p. 181. 12. Laurie. Synthetica, v. 2, p. 354. 13. C. of Judgment (Bernard), p. 420. 14. Werke; ed. Hartenstein, v. 6. p. 195. 15. Herbart, Werke, 1851, v. 9, p. 26.

NOTES BY THE WAY.

No. 12.

Sense and Nonsense.

Sense is the expression of things understood by the intellect, and there is a nonsense which transcends it, as there is one which falls short of it, a nonsense only deep-stirred feelings know. And this joyous bubbling nonsense which springs so naturally where youth and love have met is wiser than it seems. It fertilises sense. . . . Sheer unmitigated nonsense, dear, delightful! The inadequate efforts of sense to express what lies beneath the wisdom of the ages, and is the meaning of life itself. If Age finds wisdom, Youth very often has it, and the succeeding years but bring it to the light or bury it for ever.

—A. Herbage Edwards, in *Paris through an Attic*.

PROBLEMS OF SPIRITUAL EXPERIENCE

III.—LOVE, THE IDEAL AND THE ONE

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SO far we have stood by the idea that the goal of human desire, that which can completely satisfy our deepest need, is the Ideal with its threefold standard: Truth, Beauty, and Right. It is true that the unity of these primary values, which we somewhat vaguely call the Good, is hard to grasp. Truth, Beauty, and Right express essentially different forms of Rationality, and if we maintain that the unifying bond of these three, that which is the source of their common but differing rationality, is the Ideal, and that this Ideal is also the unifying principle of all Aspiration, we find it difficult, when pressed, to state precisely how we suppose the Ideal is to be construed. In the Republic, Plato pictures forth this Ultimate Good, the source of all value, knowledge and existence, as something beyond Reality, the invisible Sun of the Spiritual Life, revealed and known only by its own light, the creator and giver of all life, and it is this Idea of a Transcendent Good which serves Plotinus as the main prototype of the One beyond all Being, which he regards as the only ultimate goal of desire. Plotinus is not content to accept the divine Ideals of Truth, Beauty and Right, the Supreme Values of the Spiritual World, as that which can wholly satisfy the Soul. He is prepared to identify these divine Ideals with the attributes of God, and to identify God with the Supreme Power of the Spiritual World. But according to his philosophy, to quote the apt words of Dean Inge, "the God whom we commonly worship is the revelation, not the revealer. The source and ground of revelation cannot be revealed, the ground of knowledge cannot be known."* So the common source and ground of Goodness, Truth and Beauty must be beyond existence and beyond knowledge.

Let us start, then, from this view of Plotinus that beyond the high region of spiritual values, beyond the Great Spirit we call God, there is the Source of God Himself, the Absolute Godhead, the One, the First, the Good. It is clear that if Plotinus is right and the Supreme goal of our desire is the One and not *Nous*, the region of Person and Spirit, we shall have to depose the Ideals from the sovereign place in our religious experience, and be content to regard them as the revelation of something profounder and more precious beyond them.

* "The Philosophy of Plotinus," by Dean Inge. Vol. II. p. 107.

According to Plotinus, it is the vocation of that born wanderer, the Soul, to find its way back thro' various grades of ascent, through the psychic, spiritual and super-spiritual levels, to the Source whence its own being originated. Each level has its own good which transcends it. Matter has Form, Body has Soul, and the good of the Soul is Spirit, the good of Spirit, of the Spirit in Love, is the First Principle. From the First Principle emanates a light which is spread over the spiritual world, a light sometimes referred to as a "colour" or a "warmth." Until this effluence is received into the soul, the spiritual world with all its beauty fails to attract it. The beauty of Spirit "is inactive," says Plotinus, "till it receives the Light of the Good."* Ideal objects become objects of desire only when the Good imparts its super-celestial light, bestowing grace upon the spiritual object and love upon the subject. Of this light, the appealing beauty of things spiritual is the offspring. The source of what is loveable and desirable in the Ideal lies beyond the Ideal itself.

"We cannot stop at the world of Spirit," says Plotinus, i.e. at the World of the Ideal Values—"as if the First Principle was to be found there." "The Good," he adds, i.e. the One or the Unitary Source of the Ideals, is the only universal object of desire. "All does not aspire to Spirit, while all aspires to the Good; beings which do not possess *nous* (or spiritual conception) do not all seek to possess it, while those which do possess it are not content to stop there."† Here we have the two main reasons given by Plotinus for postulating a Unitary Source of Good beyond the Ideals themselves. The Good he considers to be a more comprehensive object of desire and aspiration than the values of the Ideal or Spiritual World, and he also holds that the soul that has experienced these spiritual values remains dissatisfied and yearns for a single, simple good beyond this plurality and separability.

As regards the first point, it is no doubt true that if the Ideals are conceived as Platonic forms appealing to the highly developed Reason only, this appeal must be strictly limited. We cannot say of our natural instincts that they aspire after the Ideal, though we can say that they aspire after the good. Proclus, the great exponent of Neo-Platonism in the School at Athens, held the view that the higher the grade or level, the further down toward the Primitive did its creative and drawing power extend. Hence whilst the Ideal Values appeal to the Spirit alone, the Good which is a grade beyond the Spiritual World appeals to Nature as well as to Spirit, and is the goal of the natural as well as of the spiritual impulses of our

* *Enneads* 6-7-22, quoted by Inge (*Id.* II. p. 129.)

† *Enn.* 6-7-20, quoted by Inge, (*Id.* II. p. 129).

life. In sympathy with this view we have the saying of Plotinus, that whereas Ideal Values as rational are sought only as the result of reasoning, the Good is desired before argument. Of course if the wisdom which the Ideal Values bring us can be reached through philosophy alone, a broader good would be needed to satisfy the non-intellectual impulses of our nature, something we could value not because we understood it but because union with it gave vital joy and satisfaction. Again, if the great object of our desire is life, then this is desired, says Plotinus, not as Spirit but as good, as coming from good and leading to good—for it is only thus that we desire life. Here again, we would reply, if “spiritual good” is exclusive of the good that can satisfy animal and bodily desires, it is indeed too narrow and specific to include all the motives for which we desire life. But on the ladder of ascent, the rungs of body, soul and spirit must be ascended each in turn, and “spiritual life” might well cover everything worth preserving, everything spiritually relevant and instrumental on the lower levels.

I am not unduly impressed therefore with this argument of Plotinus in favour of the “One” beyond the Spiritual World. If we are considering the ultimate object of desire as it presents itself to an animal or being incapable of appreciating Ideal Values, the goal of its desire should surely be sought within the limits of its own natural domain. It will desire not the supra, but the infra-spiritual. Again as regards man himself, a creature of natural as well as spiritual desires, his natural desires will find their proper satisfaction as subordinated elements within a spiritual whole. Our ideal satisfactions must include the satisfying of our instincts under the limiting conditions imposed by our ideal aspirations. Such instinctive energies as cannot be indulged without wrecking or distorting the spiritual life will be sublimated, their energies being transferred to the service of the Ideals. There seems no necessity here to look beyond the realm of the Ideal Values in order to account for the adequate satisfaction of our natural instincts and impulses.

We must look elsewhere, then, for the main argument in favour of the One that is beyond Spirit. The main point, is, I think, conveyed in the view of Plotinus that in the region of Spirit, the Soul “is not completely in possession of all that it seeks.” A hint of the reason for this dissatisfaction is given in the reference to a “kind of memory” which tells us that the Good is greater than Spirit. We read in this connection that the happiness of the soul that is united in ecstasy with the One is due to its having “become again what it was formerly when it was blessed.” It can legitimately despise “power, wealth, beauty, science, as it then does, only because it has “met with something better than these.”

It is clear that the gleam of the pure and undivided Unity has a supreme attraction for Plotinus, and that the "One" is the only thing he can love from the depth of his being. The fulfilment of the Spiritual Life, according to Plotinus, discloses the "Spirit in Love," the *νοῦς ἐρῶν*, passionately longing for the Absolute Good. The love, he tells us, comes not directly from the direct appeal made to us by the Spiritual Values. It "comes from the celestial light which streams forth from the Absolute One, the Absolute Good, that supreme Principle which made life and made spirit, the source and beginning which gave Spirit to all spiritual things and life to all living things."* The Spirit in love turns then to the source whence this love is derived, and aspires ardently after the One, and to the Ecstatic Vision which is the sole path along which it can be found.

Discursive thought cannot apprehend the Absolute, because "the discursive reason must seize first one element of the Truth and then another."† It cannot therefore apprehend the "absolutely simple." How then can we apprehend it? At first Plotinus answers: "By a kind of spiritual intuition." But he goes on to show that this is not the gift of spirit itself, but comes from the Absolute. "That which we seek to behold is the light which gives us light, even as we can only see the sun by the light of the sun." Strictly then it is not spiritual intuition but a vision born of the Absolute's own perfection which enables us to see the Absolute. That this is the intention of Plotinus is clear from his own statement that "When the soul arrives at the intuition of the One, it leaves the mode of spiritual perception . . . For spiritual perception involves movement, and the soul now does not wish to move." What replaces spiritual perception is "the receptive intuition by which the spirit perceives what is above itself."‡ This receptive intuition is the Vision of the Spirit in Love.

The essential condition of this ecstatic vision is given through the injunction of Plotinus: "Strip thyself of everything." For the time at any rate "the soul must shut its eyes to the manifold riches of the spiritual world itself, in order to enter naked and alone into the Holy of Holies."§ This is the "negative road" familiar to the mystic. There must be detachment from everything but the One thing needful. "When the soul becomes Spirit by contemplating Spirit as its one principle, the source of all being still remains unexplored. To reach this, *ἀφελε πάντα*, "take away all."¶ Now

* Enn. 6-7-23. Inge, id. II. p. 131.

† Enn. 5-3-17, Inge, II. p. 133.

‡ Enn. 6-7-35, Inge, id. II. p. 135.

§ Inge, id. II. 145.

¶ Inge, id. II. 145.

in stripping off its spiritual connections, the Soul leaves itself formless. The "One" too is formless. Even the Spirit in Love is lost in the ecstasy itself, which is beyond all longing, being pure fruition. The soul is then indistinguishable from the Absolute. It is what it sees. It is the Absolute and shares inwardly and ineffably the Absolute's experience. The experience brings absolute certitude. And not only this, but "right judgment." "It is then that it judges rightly and knows that it has what it desired, and that there is nothing higher."* The Source of Truth cannot deceive. Moreover union with the One surpasses in value everything else. The soul has met with something better than power, wealth, beauty, science, or it could not declare that it despised all these things.

Thus, for Plotinus, the consummation of all desire is to be found in "a liberation from all earthly bonds, a life that takes no pleasure in earthly things, a flight of the alone to the Alone." As compensation for the lost pleasures of this life there are far greater joys and blisses. "When the spirit is inebriated with the nectar," says Plotinus, "it falls in love," in simple contentment and satisfaction." The defence of this attitude is curiously naive. "It is better for it to be so intoxicated than to be too proud for such intoxication."† Certainly, we would reply, let love take precedence of pride. But is not the love for the One and the Alone essentially a proud love?

It is Dean Inge's conviction that "the common impression about Plotinus that ecstasy is an important part of his system is erroneous."‡ It seems to me that the common impression is here correct. The Theory of the Absolute is the top and crown of the neo-platonist dialectic, and the experience of ecstasy alone gives to that theory its experiential basis. It is quite true, as Inge insists, that these ecstatic experiences are rare with Plotinus (they were enjoyed by him on three or four occasions only), and that he accepts the spiritual world as the only possible home for the soul's ordinary discipline and development. None the less the high vision is essential to give him "the assurance that he is, in very deed and truth, all the glory that has been revealed to him,—that there is "nothing between" (id. ii. 159). It is needed also, as we have already seen, to satisfy the religious yearnings of the soul. There is indeed much to suggest that the ecstasy-experience is central for Plotinus in this sense, that it provides the supreme motive and inspiration to his whole metaphysic, that it alone, by touching the spiritual world with its magical light, gives it its intrinsic value,

* Enn. 6-7-34, Inge, id. II., 134.

† Enn. 6-7-35. Inge, id. 135.

‡ id. II. 158.

and that by filling the soul of the visionary with unspeakable things, it enables him, as Inge puts it, to return to the harmonious beauty and order of the spiritual world, indescribably enriched by that brief initiation. (id. ii. 159).

Any examination of the significance of these ecstatic experiences for the philosophy of Plotinus must bear primarily on "the relation which the vision may bear to objective truth," its alleged objective significance or validity. We must here ask two questions: What ground have we for supposing that the experience is genuine and normal? and again, how does its truth-claim tally with the logical requirements of a dialectic? With regard to the first of these queries, a strong case in favour of the genuineness of the experience is put forward by Dean Inge. It is his view that even as a psychological experience the insight is not abnormal, but represents—and this is the implication—a normal development of experience beyond the spiritual. "There is nothing strange," he tells us, "in the mentality of Plotinus except his intense concentration on the Soul's supreme quest. Those who will live as he lived will see what he saw." The ecstasy of Plotinus is not the ecstasy of excitement or hysteria, but the ecstasy of calm, experienced in solitude. And this is in accord with what Plotinus himself tells us, namely that the faculty he has followed in the Quest is one "which all have but few use" (id. ii. p. 144): the concentration of the normal powers of the mind on the return of the soul to its Creator, the end of the Soul's pilgrimage being the source from which it flowed. Only through such return can the soul realize all that it was made to be. There is no occultism here, no clairvoyance; the staff of the neo-platonic pilgrim is always the reason. But admitting and endorsing all this as we very well may, there still remains the query whether a quest on the lines indicated does not encourage the development of certain psychical states whose witness to the objectivity of things is likely to be illusory and cannot safely be trusted. It is a lacuna in Inge's magnificent piece of work that he does not discuss in this connection the psychology of mystical experience. But he tells us (on p. 153) that Böhme used to hypnotize himself by gazing intently on a bright object, and he admits that the Plotinian method of intense abstraction and concentration of thought might have consequences analogous to those of self-hypnotization. A sympathetic psychological study on comparative lines would here be very helpful. Plotinus admits that the ecstatic state is, as he puts it, "an exceedingly rare experience." It must be waited for quietly, but with the earnest preparation of the one who watches for the sun rising over the sea. Only intense mental concentration can bring this mystical state, and the question is whether the concentration which leads to ecstasy

is a rich and trustworthy development of the spiritual life or a one-sided perversion of it whose evidence tends to be illusory or misleading.

We know more nowadays of the functioning of the mind than was known in the days of Plotinus. We know how a small dose of nitrous oxide or a whiff of chloroform may transform the metaphysical viewpoint of a thinker, making a Hegelian out of a Radical Empiricist (Wm. James), or a convinced solipsist out of a man of social commonsense whose natural thought is realistic (Sir Wm. Ramsay). We know how these experiences are accompanied by profound feelings of certitude, and that very frequently the metaphysical illumination is attended by extraordinary feelings of rapture and pleasure. We know enough of the monoideistic tendencies of the hypnotised consciousness to feel more confidence in the philosophy which is bred in the concentration of the wakeful, sober state in which reflection is at its keenest and best. Briefly, with every confession of diffidence, and subject to every correction and chastisement, if necessary, from others who know better, I am not prepared to admit, as Dean Inge apparently does, that this gospel of ecstasy, this apprehension of an Ineffable Absolute Unity beyond the limitations of the Spiritual World has the metaphysical validity which it claims to possess. Moreover I am not convinced that Plotinus has sufficiently explored the possibilities of the World of Ideal Values, and would venture to maintain that a deeper insight might draw down all the real riches of his Absolute back into the world of Spirit, and that if in this process of distillation there was anything that evaporated, it might well be something that could safely be spared.

On p. 115 of "The Philosophy of Plotinus," Vol. II. we read: "The real question for the student of Neoplatonism is not whether the dialectic leads to an Absolute 'beyond existence.' It *does*." But on p. 206 we read, "As I have insisted more than once in this book, we cannot understand Plotinus unless we realise that the Spiritual World with its fulness of rich content, is for him the real world, and the ultimate home of the soul." "This," adds Inge, "is quite consistently the conclusion of the dialectic." I am somewhat diffident in the matter, having so great a respect for this powerful writer, but it looks to me very much as though on p. 206 Inge was inclined to retreat from the position taken up on p. 115 as being too extreme a statement of the case. But is it really so? If the Spiritual World were conceived by Plotinus as the ultimate home of the Soul, why does the Soul in Love look with unutterable longing away from Spirit to the One which is the true source of its longing and of that which alone can satisfy it? There can be no doubt that Plotinus

himself believed that his dialectic logically led to an Absolute beyond existence, and this being the case, I cannot see how anything but the Absolute could be regarded by him as the ultimate home of the soul and the goal of its quest and aspiration. What I am disposed to question is the validity of this belief, in particular the finality and adequacy of the analysis he gives of the Spiritual Life and World, and the necessity for looking away from the Ideals of the Spirit in his search for Unity in his experience and in his metaphysic. My own position is not indeed that there can be nothing more ultimate than Spirit: how can we yet tell how many upper rungs there are on the ladder of ascent from Earth to Heaven?—but simply that in so far as there are grades and stages beyond the Spiritual World, these must grow out of the needs of the Spirit, must emerge only when every effort to find a Unity and Harmony between the ideals of Beauty, Truth, and Right has been baffled, and that the further quest into the dazzling darkness beyond must be open-eyed, equipped with the categories and values of discarded stages, and prepared to explore the Upper Realm with a rich inventory of organizing ideas. It is indeed hard to believe that the almost Inaccessible One of Plotinus is nearer to the soul's ultimate needs than is the Spiritual World of Ideal Values.

In one crucial respect the One of Plotinus appears to me to be metaphysically unacceptable. It is, on Plotinus's own showing unintelligible. We are told that we penetrate to the One not by knowledge, but by mystic contemplation, that the One can be indicated only in negatives (Enn. VI., 8-11), that no attribute can be affirmed of it, that it is nameless, unclassifiable and in itself unintelligible, and that "it can enter into no relation with the world of existence" (Enn. VI., 8-8). How then can that which defies the effort to grasp it intellectually provide the profoundest inspiration for a metaphysical system? Must we not rather conclude that the experience of ecstasy in which, rapt from existence out of the body and away from mind, we are consciously united with "an actual Presence superior to any knowing" (Enn. VI., 9.4), overpowering and religiously determinative as its emotional effect may be, cannot claim to be a climax of metaphysical import. It has no intelligible character. The One in and for Itself neither knows nor can be known, is not an intelligible object. Hence no Metaphysic can grapple on to this experience as its inspiration and primal source. It can be a fount of unreasoned love and impassioned adoration, but not a fount of philosophy.

Now in the attempt to get beyond this impasse we get the surest indication from Plotinus himself. Plotinus draws an important distinction between the One as it is in and for Itself and the One

in its relation to *Nous* or Spirit. The former alone is ineffable; the latter can be spiritually discerned and intellectually grasped. "The One is not intelligible in itself, says Plotinus,, "but only to the Divine Intellectual principle (i.e. to *Nous*);* and further (Enn. V. 6.2)" In regard to the Intellectual Principle the One will be intelligible, an object of true knowing, but within Itself it will strictly neither possess Intellection nor be the object of Intellection."† Taking these passages as a basis, I would venture the conclusion that the true source of the Metaphysics of Plotinus does not lie where he conceives it to lie, namely in the Vision of the One as it is in and for Itself, but in that normal spiritual Vision, intelligible as well as spiritual, of the One in relation to our spiritual nature, the unifying Bond of the Spiritual World. Briefly it is the One in relation to *Nous* and not the One in and for Itself that is the goal of the Dialectic, adequately meeting the deepest need of the metaphysical impulse.

We might indeed argue to some effect that even on the premisses accepted by Plotinus himself, the One as sheer Transcendence should logically be ruled out. Plotinus admits the immanence of the Ideals in our life and endeavour, he recognises the mandatory note which their presence brings into the life, and it is true that this note of absolute authority and sovereignty can spring only from a power that is essentially independent of the experience which it inwardly regulates. But in what precise sense independent? The independence here at issue is that proper to a transcendent agency which precisely because it is transcendent (and not merely external) has power to penetrate the life and world of our ordinary experience and yet in doing so retain its other-worldliness and intrinsic sovereignty. This is surely the transcendence which our religious sense requires, the qualitative transcendence which is the very condition of the deepest spiritual intimacy, the beyond that is within. The logic of the Plotinian dialectic provides for this truly religious transcendence within the limits of the spiritual world. Why then go further and fare worse?

We seem to find a reason for the failure of the Spirit world to satisfy Plotinus in his own failure to realise adequately the true nature of love. If Love is identified with Aspiration, how can it be ultimate? As Aspiration Love always points beyond itself. It is

* Plotinus: The Ethical Treatises, translated by Stephen Mackenna. Vol. 1, p. 141. The extracts that immediately follow are from Mackenna's translation of the Preller-Ritter extracts.

† Cf. Enn. VI. 9.6. "The One is good not in regard to Itself, but in regard to the lower that is capable of partaking in it." Also Enn. VI. 9.3. "When we call it a Cause we are not making an assertion about It, but about ourselves: we speak of what we derive from It, while It remains steadfast within Itself."

the Soul in need but it is not that which can satisfy fully the need of the soul.

The way beyond Plotinus lies, it seems to me, through the Christian reinterpretation of the meaning of Love, as conveyed through its Christian doctrine that "God is Love," and through the searching criticism of the great Augustine. Augustine stands as it were at the watershed of Ancient and Modern Thought. His philosophy was learnt in the school of Plato and Plotinus, but he found in Christianity something that he could not find in the school-philosophy. Christianity as it appealed to Augustine had its foundation in the belief that the Logos was made flesh and dwelt among us and took upon himself the form of a servant." Briefly, as Inge puts it,* "the religious philosophy to which Augustine was converted, and in which he found satisfaction, was the Platonism of Plotinus with the doctrine of the incarnation added to it." "The Logos made flesh, that I found not there," was the decisive consideration which made him a Christian." (id. ii., 208).

Now I am not concerned to ask whether the doctrine of the Incarnation in the strict sense expresses the truth of Christianity as Christ himself conceived it or whether it simply expresses that truth as Augustine conceived it. I say "in the strict sense," for it is clear, as the very etymology of the word suggests, that the Incarnation is primarily concerned with the descent into a human *body* and that any universalizing of the doctrine which excludes the Logos made flesh may be a doctrine of divine immanence, but will not be a doctrine of Incarnation. What impressed Augustine was not so much the fundamental and distinctive doctrine that God is Love, but that this God of Love took the human form in Jesus Christ. For our purposes it will be sufficient to consider the doctrine "God is Love" in its more general form. Even in this more general form it seems to me to be the true spiritual solvent of the Inaccessible One of Plotinus. Perhaps it may also prove to furnish the conception whereby the Ideal World of the Spirit may be unified without going beyond and outside itself for its unity and source of Inspiration.

It is not easy to reconcile the view that God is Love with the view which identifies Him with the Ideal. The Platonic Socrates in the Symposium argues that whereas the object of Love is ideal,—beautiful, good and true, Love itself is not ideal but is rather a desire or aspiration after the Ideal. The aspiration is one thing, the ideal another, and we must not confuse the loving and the beloved. The Platonic inference is that God could not himself be love

* id. II. 207.

or aspiration, for in that case He would be empty and imperfect and would not Himself be Truth, Beauty and Goodness, not Himself be the Ideally Good. The true function of Love is to mediate, to mediate between God and man. Aspiration is the ladder that leads from earth to Heaven, but it is not Heaven itself.

We may perhaps agree that God is not Love in so far as by love we mean no more than aspiration. We may agree that that which can alone satisfy our deepest need cannot be the mere prolongation or intensification of that need and of the quest for its satisfaction. We may agree that however we conceive the object of our need and aspiration, he must be the Good that satisfies, he must be a Perfect Being in the sense that the Ideals are his very attributes. And yet we might then go on to insist that none the less this Perfect Being was still essentially Love since the supreme function of Love is not aspiration but redemption.

With this insight we cross the watershed which divides Platonism from Christianity. If, by love, we mean, not aspiration after the ideal, but the saving help given to the soul in need, we seem to get nearer to a valid conception of God as Love. This does not imply that God ceases to be the Perfect One, unless freedom from the need to love and save is to be regarded as essential to perfection. May not the truth rather be that the Perfection after which one yearns must be intrinsically a loving and a saving power?

It is as a saving Power at any rate that Christianity has conceived its God. Christianity recognises that man's deepest need is to be delivered from evil through the power of redemptive perfection and that man's love for his fellows must follow in this primary essential, the pattern of God's love for man. The love of the Christian has no doubt an element of aspiration,—it has and must have the hunger and thirst after righteousness and eternal life: but the purification of the human soul is to be sought not directly through a cult of self-realization, but indirectly through the service of humanity. There is the refreshment of the soul in prayer, but this is subsidiary. The winning of the world is the essential thing: briefly, disregarding all the side-tracking inevitable in a great world-movement, the essential stress is laid on the love that redeems rather than on the love that aspires. World-redemption is the goal and not the happiness and bliss of the elect. The characteristic maxim of Plotinus "Never cease working at thy Statue" suggests, says Inge, "a scheme of self-improvement more like that of Goethe than the Christian quest of holiness." (id. ii. 172).

And with this stress on redemptive action goes the horror of Evil. To regard evil as a mere effect of perspective, a good in the making, good in the wrong place, a privation of good, something

negative and illusory, a mere missing of the mark—is to have lost touch with the essential attitude of Christianity and its most distinctive characteristic. Plotinus has little or nothing to say of the “dark night of the soul” (id. ii. p. 150). It means repentance and remorse and a sense of sin. But Plotinus, like Spinoza, discourages all contrition, and Inge reminds us of Spinoza’s saying: “It is manifest that we can always get along better by reason and love of truth than by worry of conscience and remorse.” Christian mysticism considers quite otherwise the darkness of evil. If the Christian struggle for spiritual victory is more intense than the Platonic it is because the contrasted blackness of evil is felt more vividly. Plotinus knows of no devil and no active malignancy in the nature of things. There is no sense of horror in his philosophy from first to last. The temper of the Neo-platonic saint is serene, cheerful, manly. But, as Inge remarks (id. ii. 152), “We are meant to feel the strength of the forces that pull us *downward* as well as of those which draw us upward: indeed we can hardly know one without the other.” . . . “Only Christianity,” he adds, elsewhere, “only Christianity among all religions and philosophies has really drawn the sting of the world’s evil.” (cf. id. ii. 208-9). It is only Christianity that has realised that the conquest of evil demands the voluntary acceptance of unmerited suffering.

The great strength of Christianity as compared with Platonism and Neoplatonism more particularly, lies in its profound grasp of the problem of evil and of suffering. The Stoic sage,—and the Neoplatonic ethic is essentially stoical in cast,—will “practise benevolence without pity, acquiesce in inevitable evil without revolt, and love the Lord without hating the thing that is evil.” (id. ii. 232). The Christian attitude is here profoundly different and far more thoroughgoing. Its very symbol is the Cross, and the Cross means self-sacrifice. Christianity and the Cross are inseparably associated, and the Cross was foolishness to the Greeks. But it expresses the profoundest answer to the problem of evil.

Let us now gather our threads together. The Christian doctrine that God is Love rests on the view that man’s deepest need is to triumph over evil, not only in his own heart but in the great arena of the world, and that it is only the power of Love, understood as sympathy, service and self-sacrifice, that can conquer evil and redeem the world. Love here is in primary place not the imperfect, aspiring after perfection, but rather perfection sharing our sorrows and bearing our burdens, and revealing its sovereignty through service. As such Love for the Christian, I take it, is God, but it is no longer the God of Plotinus.

Let me add this further reflection. Love, as Christianity understands it, has a deep ethical note lacking in the love of the Neoplatonist which is very largely aesthetic in its cast. Love, says Proclus, leads all things to the nature of the Beautiful. Such love is a love of what attracts by its expressiveness or intrinsic loveableness. It is the love of something higher than ourselves, of something that can stand to us as a pattern or exemplar. And it lasts just so long as the beauty we aspire after continues to be persuasive. Much of our religious love is of this kind. It is a love for the beautiful, a love for the spiritual heights, and as such is the inspiration of our personal life. None the less it has a fundamental weakness: it cannot, unless reinforced by a deeper insight, stand the strain of what is unattractive, ugly or it may be repellent. Its roots are not deep enough for this. The love which is set on meeting the needs of others for help on the spiritual journey is a far stronger love. Here what attracts is not *beauty* but *need*.

The true ethico-religious lover, as distinguished from the aesthetic lover, will love all men through the common need they have for spiritual help. He will love the individual soul as such, whether attractive or unattractive, simply as a soul in need. This is the love of true philanthropy, and is quite distinct in tendency from the love of spiritual aspiration which is largely centred on its own joys and its own self-culture. Now the aspiration of the Neoplatonist is very largely the love of the religious artist rather than the love of the humanitarian or philanthropist. It lacks the deep and moving concern in the development of social ties and relationships: it lacks that enthusiasm for humanity which is characteristic of the love that helps and saves, the love of sympathy, service and self-sacrifice.*

Our conclusion then would be this. There is a genuine sense in which we can refer to Love as the greatest need of the human soul, and so identify Love with God. The greatest need of the human soul, we may say, is for a Perfection that is also Love, for an Ideal that is not only loveable but actively good, dynamic and redemptive. Only the Ideal can satisfy aspiration, but unless it is also Love it cannot satisfy love. Moreover, if the Providence that orders the Universe is not also Love, what guarantee have we that our freedom will not be handed over to some crushing and inhuman Fate. The belief we have that our freedom is not illusory rests on the conviction that the Ideals which cover it with a sense of obligation and provide its standards of action have as the bond and clasp of their perfection the nature of Love. And it does not matter for the immediate purpose of this argument if this overshadowing Love be

* On this point, of Ed. Sprenger: 3rd edition. Section II., 4.

regarded as supra-personal, provided that the supra-personal is not understood, as transcending the personal in the sense in which the One of Plotinus transcends the Spiritual world, but is identified rather with the Love that can redeem the imperfection which looks towards it as the one thing needful, and completely satisfy its profoundest needs. It may well be a law of the Universe that only the love of a higher order of Being can fully satisfy the need of a lower order of Being, but it may also be a law of the Universe that the higher order can perform its perfecting work only by meeting the lower order on its own level, and this in ways more intimate and redemptive than would be open to strictly personal agencies, fettered by the familiar limitations of inter-personal fellowship.

NOTES BY THE WAY.

No. 13.

The Substance of things hoped for.

When faith is viewed under the category of hope rather than under that of belief, its subject-matter shifts from our ground of assurance in the existence or reality of a thing, to our willingness to look forward to it as an object of our interest or endeavour. Faith constitutes the willingness to pursue the things for which we hope, and religion is more like a search for something missing, than like a system of beliefs about something. In general, believing *in* as distinguished from believing *that*, marks the distinction between religious faith and scientific belief or opinion. If religion, in so far as it consists of such faith, has any vitality, it is because life fundamentally is problematic or adventurous. We may look upon ourselves as embarked on a voyage of discovery. We may entertain hopes and act upon them. We may make demands on life; we may exercise faith. But such faith, precisely because it makes demands on life and is radically adventurous, guarantees nothing. It takes a risk; it undertakes a search for something which *may* possibly never be found. But faith is not only adventurous, it is also blind. The account of faith as a kind of evidence gives faith an independent intellectual function, and there is a common notion that by faith we know God. By faith we know nothing. By faith we are engaged in a search, the search for the gods, let us say, but only by intelligence may we ever find them. The search begins in darkness. We know not where lies our salvation nor whither we should turn. But intelligence discovers pointers from time to time, which make the search not wholly blind. We must feel our way. For intelligence is

"a torch of smoky pine
That lights the pathway but one step ahead
Across a void of mystery and dread."

In such a precarious situation it is a great temptation to

"Bid, then, the tender light of faith to shine
By which alone the mortal heart is led
Unto the thinking of the thought divine."

But faith has no light of its own. Faith is a moving force, not a light. Faith is precisely that which needs illumination to bring it to its goal. We must be satisfied, therefore, with our "torch of smoky pine" and patiently, faithfully pick our way "unto the thinking of the thought divine."

—H. W. Schneider, in *The Journal of Philosophy*.

THE PHILOSOPHY OF AQUINAS.*

By the Rev. W. Ryan, M.A., Vice-Rector, Newman College,
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THE near approach of the seventh centenary of the birth of St. Thomas of Aquin or Aquinas, as he is more shortly called in philosophic literature, is the reason of our attempting to assign him his place in the history of philosophy and to recall some of his teachings that are of interest to-day. It is a pity, that the strictures passed on Scholasticism in its decadence, should in the minds of many be deemed applicable to its golden age and the master mind of the thirteenth century. In lectures on the History of Philosophy it is not unusual to dismiss Scholasticism with a few words similar to these:—"So far as constructive and independent speculation were concerned the period of scholasticism was almost barren; the material with which the scholastics dealt was of the most abstract nature; it consisted of universal principles, emptied of much of their vital contents, and so, in spite of its energetic development of the syllogistic method, the impression which its work produces upon us is that of its poverty, its triviality and its unreality." There is not much of even faint praise in that presentment of it to receptive students. A Scholastic of to-day would surely be forgiven for retorting in the words of Professor Watson to Balfour's criticism of Kant:—"We may see that his criticism is destitute of that sureness and lightness of touch which can only come from close familiarity with the subject."

While the works of Aquinas were to be read only in the original Latin, a busy philosopher might be excused for offering a criticism at second hand and for not having a close familiarity with them. But his chief treatises have been translated even into English, and good summaries of his views on philosophic questions can be found in Stoeckl's and de Wulf's histories of medieval philosophy. In future this great thinker's philosophic system may in consequence be thought as worthy of note in the progress of thought as that of Bishop Berkeley in centres of learning, where now he is dismissed as poor, trivial and unreal.

Aquinas must have been a prodigious worker. He died at the early age of forty-eight, yet the Roman edition of his works, published in 1570, fills seventeen folio volumes. The two most import-

* At the International Congress of Philosophy held recently at Naples, a sitting was devoted to a "Solemn Commemoration" of St. Thomas Aquinas, on the occasion of the 650th anniversary of his death. The 6th centenary of St. Thomas' "canonization" occurred last year: next year (1925) will be the 7th centenary of his birth, which according to the Louvain History of Philosophy, took place in 1225.—*Editor.*

ant are unquestionably his "*Summa Contra Gentiles*" and his "*Summa Theologica*." The former is an apologia for Christianity in which he sets out to establish the truths of Christianity on purely rational grounds against unbelievers and heathen and Arabian philosophy. In the *Summa Theologica*, his latest and most matured work (left by himself unfinished), he is constructive in outlook. In it he undertook to reduce the speculative development of his time to an organised and complete system. Here he mingles theological reasonings, based on revelation, with purely philosophic methods of exposition. This manner of presenting the subject, common to many scholastics, has led critics to deny to them the power to reason freely in the domain of pure philosophy. Their criticism takes something of this form:—"How can thinkers who must on other grounds hold a definite body of doctrine be said to be unhampered in philosophical speculation? They themselves have admitted that philosophy was for them only the handmaiden of theology." No scholastic dreamt or dreams of denying, that in the doctrines of his religion he considers he is in the possession of religious truth; but he questions the right of anyone on this account to deny to his philosophy the status of a genuine philosophic system. If for him philosophy is taboo, then logically it must be taboo for Berkeley, Descartes, and indeed for every Christian or adherent of any religious body which has any definite doctrinal content.

The ground that is common to scholastic philosophy and theology is very much narrower than most think. There was nothing for example, in catholic dogma to oblige Aquinas to explain the constitution and development of physical nature by the theory of primary matter and substantial form. The great Augustine was Platonic in philosophic outlook and many of the medieval scholastics embraced atomism, notwithstanding their catholicity. There were those among them who favoured Mysticism. Opposed to the scholastics were the Eriugenian pantheists and the Latin Averroists, and on the very eve of the Renaissance Nicholas of Cusa, a Cardinal, found nothing in his religion to forbid him his theory of the coincidence of opposites. The Thomists' and Scottists' philosophic differences were such, that they enjoyed breaking a lance with one another as much as did William James and the Hegelians.

Aquinas himself was not unaware of this possible clash of theology with philosophy and sought to establish the complete autonomy of philosophy by the criterion of distinction which was in use in the thirteenth century. This distinction was not found in the identity or diversity of the subject matter (the material object of a science), but in the manner in which the subject matter was dealt with (the formal object). The formal object of theology is not that of philo-

sophy: the former studies the supernatural order as revealed in the word of God, the latter examines the natural order by the light of reason. Diversity in formal object involves diversity in principles and in constructive method. The study of dogma rests for the Scholastics on authority, the rational study of the universe on scientific demonstration. Aquinas and the scholastics generally wish their philosophic system to be judged solely on its merits as a reasonable explanation of philosophic truth and are confident that they have contributed something worth while to the progress of thought and worth the notice of students of that progress.

Scholasticism, as represented in its perfection by Aquinas, was a gradual growth. Augustine's philosophy was distinctly Platonic and this preference for Plato over Aristotle was preserved in certain schools well into the Middle Ages. Western philosophy branched out into many systems. From the ninth century onwards a well-defined pantheism, arising out of the Neo-Platonic, was in conflict with various forms of Aristotelian individualism. Till the dawn of the eleventh century there was not drawn a sufficiently clear distinction between the domains of theology and philosophy. Nor was any incongruity seen in building up systems eclectically, borrowing from various philosophies, as it suited. "They were labouring," wrote John of Salisbury, "to reconcile when dead those who were opposed to one another as long as they lived." With the growth of scholasticism through Anselm, Alexander of Hales, Bonaventure, Thomas Aquinas and Duns Scotus, conflicting elements were gradually eliminated and it is the merit of Aquinas to have attempted a general synthesis of the philosophy of his time.

The scholastics of the thirteenth century considered, as Kant did later, that Aristotle left practically a complete system of Formal Logic. Their merit lies in their having brought out the implications of his scheme. Students of to-day enter, perhaps not always heartily, into the inheritance they have left them. Aquinas and his followers have been condemned for over-subtlety in the use of syllogistic argument. True, there were logical excesses among those whom scholastics of to-day call the decadent scholastics. But one, used to syllogistic argument, in which clarity of thought and definiteness of statement are rigorously exacted, is apt to be impatient with the sometimes diffuse and fruitless philosophic discussions, in which the parties to the discussion move so easily away from the point and abundance of irrelevant matter tries the patience of even the most phlegmatic.

It is probably in his metaphysics that Aquinas appears most subtle and abstract; yet the understanding of his position is no more difficult than is that of Kant or Hegel. Metaphysics was the

vogue in those days and the School of Louvain seems to admit the subject was somewhat overdone, judged by modern standards. But works like those of Bergson and Bradley would, one might think, mitigate this comparative judgment. Aristotle was followed in the main and the study of Being as such was approached from the standpoint of the individual. Aquinas' advance on the Peripatetic position is found in the study of what are called the transcendental notions—Unity, Truth, Goodness. The simple, though comprehensive concept of Being is thus elaborated as to its content. He made more use than did Aristotle of Act and Potency, developing the idea, till these two notions became synonymous with "being determined" and "being determinable." Aristotle seems to have restricted his Hylemorphism to the process of organic change; Aquinas applied it universally within the real order. It is even found in his logic and ethics—the free act, for instance, is to its intrinsic end as potency is to act.

The scholastics were at variance in regard to the question whether matter could exist without a substantial form. The earlier ones maintained that it could, but Aquinas was adamant in arguing against them. On the other hand he taught that corporeal substances alone have primal matter as a constitutive element. He urged, that, since it is the form alone that actualises matter and gives it perfection, there could be no contradiction in the concept of forms subsisting without any admixture of matter. Thus for him pure intelligences were intrinsically possible. His ardour was equally intense in asserting the unity of substantial form against the pluralistic view which was common at his time. He thus emphasises the unity of the individual and this part of his teaching has had a far reaching influence on Thomistic philosophy.

The controversies on Universals which convulsed the Schools in the late eleventh and early twelfth centuries were considered settled in the thirteenth, but Aquinas is given the credit of stating the moderate realistic position most precisely. The controversies raged round the reality of the thing, after it was established in existence. The universals, Aquinas taught, involve a subjective elaboration to which the mind subjects all essences, when it considers them apart from their individualising conditions. Formaliter (a difficult word to express adequately in English) the Universal exists only in the mind, but it has its foundation in the thing. There is always the intrinsic reference to the thing. It is interesting to compare this view with that of Professor Boyce-Gibson in his *Problem of Logic*, p. 24:—"The conceptualism we have adopted is simply realism tempered by the requisite reference to purpose."

It would be tempting to follow Aquinas in his treatment of

the principle of individuation, but that would take us too far afield in a paper restricted as this is. We shall leave his metaphysics with a brief reference to his teaching on essence and existence. The schoolmen were sharply divided as to the distinction between these two notions. In any one actual being is its fundamental reality *one* thing and the act by which that reality exists *another*? St. Thomas held a real distinction between the two, saying that essence is to existence as potency is to act.

It is in his Theory of Knowledge that we come upon distinctive contributions to philosophic thought that have a modern touch. He clearly recognised the ever recurrent difficulty of constructing and crossing the bridge from mind to matter. Percept and idea are not the external objects perceived or conceived, yet we claim that through them we have knowledge of those objects. He was not original in teaching that sense and understanding are essentially different from one another nor in holding that, since the union of the intellectual principle with the body is natural, it must be natural for intellectual knowledge to rise from the sensible to the supra-sensible. He called the formal principle of sense knowledge, the *sensible species*, and that of intellect, the *intelligible species*. The former gives a sensuous presentation of the object, the latter one of its essence. There is a familiar note in the denial of innate ideas and the making of the intellect almost a "tabula rasa." If it is to be filled with knowledge, it must start from experience. His theory of Knowledge is that which is known as the correspondence theory. Kleutgen's reduction of the whole scholastic theory of knowledge to three principles is instructive:—1. The object known is in the knowing subject as a mode of being of the latter. 2. Knowledge arises in the subject knowing after the manner of an image representative of the object known. 3. This representation is engendered by the concurrence of the knowing agent and the known object—a co-operation which secures the real objectivity of knowledge. How Aquinas strove to secure this real objectivity of knowledge we proceed to enquire from himself.

The seat of sensation, he taught, was the whole organism and, while giving its due place to the physiological he emphasised the psychical element in sensation. He asserted the irreducibility of the psychical and the physical, but was careful to affirm the interdependence of both in sense life and in all appetitive and perceptive activity. His theory of sense knowledge is briefly this:—The senses are passive. They require a stimulus to react. This reaction is called the expressed sensible species. On passing from the field of consciousness sensations leave an image (*phantasm*) and this *phantasm* plays practically the same part in ideation or intellectual cog-

nition, as does the image according to modern psychology. Indeed here one might be reading Stout on sensation. In intellection proper Aristotle was closely followed except in a few particulars. Sensation gives knowledge of the contingent only, intellection of the essences of things. Spinoza made much of this point later. The intellect is able to divest the particulars of individualising notes and to arrive at concepts which, being abstract, admit of being referred to an indefinite number of individuals. The abstractive power of the intellect is a salient point of scholastic teaching. At once the difficulty arises:—How then can we have an idea or concept of a particular? Aquinas sought for it in a kind of reflection on the sense data: but here he is admittedly obscure. Intuition was invoked by other schoolmen to get over the difficulty.

There was a very definite break with Aristotle in regard to the nature and functions of the active and passive intellects. The terminology was kept, but they are now only aspects of one and the same intellect which in nature is immaterial. Aristotle had left the passive organic, and, as far as one can gather from this obscure part of his system, had made the active, distinct and immaterial. According to Aquinas, in the act of cognition the intellect on its active side makes the sense objects, which in themselves are only potentially intelligible, actually intelligible, thus producing the so-called intelligible species. The "possible" or passive intellect then receives this intelligible species into itself, "is informed by it," and thus knows the intelligible in the object. In this way is the concept formed. It belongs to the "*Intellectus passibilis*" or passive intellect and enables it to form judgments. The Neo-Scholastic School of Louvain has modified this somewhat elaborate metaphysical machinery here, as in other parts of the scholastic system.

As though anticipating Berkeley's difficulty, that there is then no escape from saying the "*esse of things is their percipi*," Aquinas insists, that we know objective reality *in* the idea and not merely *by* it. He himself uses the expression "*verbum mentale*," mental word, for the idea. To quote directly from himself (St. Thomas, opusc. XIII, p. lx, Eng. Edn. *Summa Theol.*):—"What therefore is so formed and expressed in the soul is called the interior word; and is therefore related to the intellect, not as that *by which* it understands, but as that *in which* it understands; because in what is thus expressed it sees the nature of what it understands." He is clearly trying to avoid Berkeley's *impasse* and to affirm, as best he can on his theory, that the intellect is in immediate touch with objective reality. . His next words are even more explicit:—"If the same thing is the intelligent subject and also the thing understood, then also the word is the idea and the likeness of the intellect whence it

proceeds; but if the intellect and the thing understood are not the same, then the word is not the idea (ratio) of the intelligent subject but of the thing understood, as the conception which anyone may have of a stone is the likeness of the stone only." He links up the *verbum mentale* with the *verbum vocale*. "The name 'stone' does not signify the intellect itself . . . nor the idea whereby the intellect understands, nor the act of understanding. The word inwardly conceived proceeds outwardly, as is proved by the exterior word which is its sign, proceeding vocally from the one who utters it inwardly."

Descartes evidently was influenced to assert his sharp distinction between the immaterial and material by the schoolmen's teaching on the part the phantasm plays in cognition, which comes in when Aquinas is elaborating his theory. The sense reality acts on the understanding through the intermediate agency of the phantasm, but this latter exercises only an instrumental causality subordinate to the efficiency of the active intellect. Thus there is a refusal to allow the sense image to act directly on the immaterial intellect. But the schoolmen differed from Descartes in asserting, that the immaterial intellect, as being a higher grade of existence, could act directly on the lower grade, the sense image. This effort alone of Aquinas to bridge the gap which many think unbridgeable and across which many a bridge has been tentatively thrown only to crash, before it has been securely moored to the other side, is, we submit, worthy of an honoured place in the history of these attempts. One can scarcely with justice label his full treatment of this central question as empty of content, poor, and trivial.

Under Psychology Aquinas really studies the Psyche, its nature, as well as its acts; and schoolmen wonder why the nature of the psyche should be banished to the much abused metaphysics. To them it savours of Hamlet without the Prince of Denmark. For Aquinas the proper object of Psychology is the whole man, not the soul or mental process alone. He might profitably be used as a "go between" in the strife of the behaviourists and introspectionists. Naturally he held, that the soul was the substantial form of the body and gives the body its substantial perfection. It is the formal principle of all human activities. But he by no means considers, that in the living man it is a separate entity, like a pilot in a ship. It is separable certainly; but the living man is in every sense a complete unity. Philosophers of his time, while admitting this, suggested, that there were also other forms, like the "*forma corporeitatis*." Against this plurality of forms Aquinas argued strongly, holding tenaciously to man's unity. In this he seems to be in accord with orthodox psychology of to-day which reprobates the old Platonic

divisions in man. And, although St. Thomas advocates a real distinction between the soul and its faculties against the Augustinian identification of the soul with its faculties, he cannot in this be credited with introducing divisions into the soul, as he is committed to the simplicity of the soul, as being immaterial—and this negates all division or composition. The much misunderstood faculties are only powers of the soul.

In still another important point he differs from St. Augustine. For him the dominating power in psychic life is the intellect. Everything must be brought to the bar of the intellect. He would thus be opposed to the soft religious philosophy of to-day, which seeks to escape from intellectual questionings by appealing to obscure feeling criteria, with which intellect is forbidden to interfere. Augustine gave Will the chief role, not precisely as Royce and the Pragmatists generally teach, for he and the schoolmen who followed him were agreed, that there is nothing willed, unless it is first known intellectually. De Wulf puts the scholastic view concisely:—"The action of the will is necessitated, if the absolute good be presented by the intellect; it is free only when the good presented is contingent." But the intellect influences the will, not "*per modum agentis*" but only "*per modum finis*" or teleologically. The freedom of the will, for Aquinas lies in the fact that the will, as an immaterial power, determines itself to act or not to act. It is therefore, antecedent to acting positively indifferent to various courses of action and can choose between them. On the other hand the will is necessarily impelled towards good in general, because the proper object of the will is the "*bonum*," as the proper object of the intellect is the "*verum*." The reason it sometimes chooses what objectively is the less good is that it has it presented to it "*sub specie boni*." Objections to this power of the will, drawn from the fixity of nature's laws, he would meet, as do the modern libertarians, by denying they operate in the world of open possibilities or in the realm of the immaterial. But in this short paper I dare not enter into that hectic arena.

In Ethics his treatment of conscience is of interest. It is not the "voice" or special faculty of Butler, nor the categorical imperative of Kant, but the ultimate judgment of right reason; based upon principles that have become habitual—called *Synderesis*. The law of God, as far as it is known by the reason, is the rule of moral conduct. Strangely enough, in view of Kant's distinction between the pure and practical reasons, Aquinas says (Q. 94, Art. 2, part 2, *Sum Theol.*):—"The precepts of the natural law are to the practical reason, what the first principles of demonstration are to the speculative reason . . . As Being is the first thing that falls under

the apprehension simply, so Good is the first thing that falls under the apprehension of the practical reason, which is directed to action (hence practical and not speculative) : since every agent acts for an end under the aspect of good . . . Hence the first precept of law is—good is to be done and evil to be avoided. All other precepts of the natural law are based upon this: so that whatever the practical reason naturally apprehends as man's good (or evil) belongs to the precepts of the natural law as something to be done or avoided." The subsequent development of Aquinas' thought here covers so much ground, that we must be content with saying, that the good is that which helps man to the attainment of the perfection of his nature—his final end—which for Aquinas, as for Aristotle, issues in perfect happiness.

Aristotle is followed in the teaching, that happiness lies in action and the activity upon which perfect human happiness is based must be the noblest for which man is by nature qualified. Aquinas has already accepted the position that the highest human activity is that of the intellect, i.e., knowledge; and the noblest knowledge is that of God. This knowledge cannot be that got through demonstration nor yet by Faith. It must be knowledge attainable by all, and these avenues of knowledge are closed to many, therefore it must be the intuitive knowledge of God, as along this line of knowledge alone can happiness be attained by *all*. This, he further urges, can be had in its perfection only in the next life, hence the ultimate destiny of man must be in the life to come.

Moral evil is for him a privation—a negation. The cause of evil is a "*causa deficiens*." Moral virtue with him, as with Aristotle, is a habit of will. Intellectual virtues are only virtues "*secundum quid*." They condition only the possibility not the actuality of the activities. Moral virtues condition not merely the possibility but the actuality of the acts. By them man not only can, but does act morally. That an act may be morally good, a triple harmony with the law is requisite—a harmony of the object, of the intention or end, and of the accompanying circumstances. If one of these is evil, the whole act is intrinsically evil. It is one of those inexplicable marvels of persisting error to credit any scholastic with the dastardly teaching that "the end justifies the means." If they taught it, the best place for them would be gaol or a lunatic asylum. Happily they never taught it nor could teach it and be schoolmen.

Though St. Thomas does not enter into the question of the origin of the State, he deals with the various possible forms of government and asserts they are all legitimate, provided they govern for the common good. The individual is not for the State, but the State for the individual. Aesthetical questions also come into his philo-

sophic system. The beautiful is for him a complex notion. There is the subjective aspect or impression which is caused by something in the object adapted to produce it. It is the so called "*claritas pulchri*" which secures the coming together of the subjective and objective elements of beauty in a relationship of causality.

We have been able merely to skim the surface of portions of the philosophy of this great thinker and fear that, "*Cum brevis esse laboro, obscurus fio.*" If our obscurity but lead the reader to see for himself in the original, whether he be poor, trivial and empty of content, we shall rest assured, that justice will be done him by us indirectly. His method of treatment makes for clarity. He begins every question with stating the objections to his own solution. He then expounds his own view and finally answers the objections. It is in the grasp of these objections that he shows his wide reading of other philosophies, while his constructive genius appears in the synthesis he builds up of a complete and well rounded system of philosophy.

And what of scholasticism to-day? There are many important centres in Europe, where on account partly of the great diversity of nationalities of the students the text-books and lectures are in Latin, though indeed it is claimed, that the Latin of their great master, Aquinas, is still the best vehicle for precise philosophic statement. But there is the famous school of Louvain in which the vernacular (French) is used. It was founded in 1888 by Pope Leo XIII. and placed under the direction of Cardinal Mercier. "We consider it not only opportune," wrote the Pope, "but necessary to give philosophic studies a direction towards nature, so that students may be able to find in them, side by side with the lessons of ancient wisdom, the discoveries we owe to the able investigations of our contemporaries and may draw therefrom treasures equally profitable to religion and society." Mercier himself is explicit on the purpose of the school:—"To form in greater numbers men who will devote themselves to science *for itself* without any aim that is professional or apologetic."

De Wulf, one of the professors, writes:—"Modern scholasticism aims at submitting the great, leading principles of medieval scholasticism to the control of the latest results of scientific progress. Theories now known to be false are simply abandoned; the great, constitutive doctrines of the medieval system are retained, but only after having successfully stood the double test of comparison with the conclusions of present day science and with the teachings of contemporary systems of philosophy." Hence, whereas the old psychology was largely metaphysical in treatment, the new school specialises also in experimental psychology. A general course in anatomy

and physiology is regarded as a minimum for all. Three hours a week are devoted to this during a whole term. As a preparation for cosmology a course in Physics and Chemistry is compulsory and this for first year students. For the Doctorate much more of these subjects is compulsory. Special courses, including Cytology, are framed for this higher degree. Seminars are an integral part of the whole system.

As giving a general idea of how the Louvain School brings scholastic philosophy into line with modern developments we may take Mercier's own treatment of logical truth and certitude, as given in his *Criteriology*, one of the Louvain textbooks. The old scholasticism treated the problem deductively, establishing a synthetic theory on the metaphysical theory of divine exemplarism. Mercier bases his on real relations in the objects themselves, urging that the objective manifestations of these relations to the mind is of the ideal order, as in the exact sciences. These truths are in turn applied to a real extramental world, so that the laws of the ideal relations become the laws of things; leaving him two problems:—The objectivity of propositions in the ideal order and the objective reality of our concepts. Incidentally he keeps in touch with the Kantian criticism and the Pragmatic solution.

The wealth of published works of this school and the excellent reviews which reflect the vigorous intellectual life of this great Belgian University are an assurance that it is well worthy the notice of the philosophic world at large.

NOTE:—De Wulf gives an interesting account of the changes in the method of teaching the new scholasticism has adopted. He contends, that the old system of baldly presenting the reasons for and against the thesis, the answering of objections in the same curt fashion and the vigorous syllogistic demonstrations will probably appear to the modern mind, accustomed to literary treatises on the subject, as a monotonous dissection of human thought in a stereotyped way. The Louvain school strips the old treatises of their medieval dress and presents them, without detracting from their force, in a more readable fashion. He even goes the length of saying that, the idea of writing a treatise on *criteriology* or a book on contemporary psychology after the manner of the *Summae Theologiae* or the *Quodlibeta*, would be simply barbarous. They adopt also the new didactic methods of the monograph and dissertation at certain stages of the student's course. Thus the student learns to express his thoughts in a way that will appeal to others.

He claims, that the Seminars or classes for individual tuition are of special value in training the students in right methods of investigation and the proper use of means of research. Each contributes his share to the achievement of some common purpose and a student's taste for some particular line of work can be fostered and his intellectual vocation definitely decided by some initial success.

De Wulf further admits, that the commentary which was the chief vehicle of instruction in the thirteenth century, has been long since abandoned in favour of a systematic exposition of the various branches of philosophy. This method will more easily give the student a unified view of all philosophy and prevent useless repetitions. It makes it easier to enrich the new scholasticism with doctrines from other systems, as well as to make better use of the findings of the various special sciences.

THE TERCENTARY OF GEORGE FOX

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IT was in the times of Charles I., Archbishop Laud, Bacon and Milton, Strafford and Oliver Cromwell, Hampden and Pym, the Long Parliament, and the Westminster Assembly of Divines that George Fox, "the man in the leathern breeches," appeared. The Divine Right of Kings was struggling with the Divine Right of the people. "Cursed Toleration," as it was called, "Intolerable Toleration," was grappling with the ecclesiastical monopoly and dogmatic authority, claimed by Kings and bishops. Anglican Catholicism, in the person of Laud, was seeking to crush, on the one hand, Roman Catholicism, and on the other, the hydra-headed forms of non-conforming protestantism. Industrialism in Church and State was in conflict with dying feudalism and the traditions of the Church of the Middle Age. Charles I. proudly refusing to be "the phantom of a King," and Oliver Cromwell and his Ironsides, with his "Take away that bauble," and "Let God arise and his enemies be scattered," Archbishop Land and his "Mass Book," and Jenny Geddes, with her fabulous stool flung at his Grace in St. Giles Cathedral, are typical of those days in England and Scotland. A rude, rough, cruel time, with its policy of "Thorough" in Ireland, its free use of hot branding irons, the pillory, the prison, the scaffold, ear-clipping, cheek-stamping, and the sword.

In such a rude, stormy period, George Fox appeared like a star peeping through the rifts in the clouds of a stormy sky, or a breath of spring breathing over the wintry land.

A strange man indeed, journeying on horseback from place to place, organising religious societies in which were neither priests, nor presbyters, nor preachers, nor prayer books, nor sacraments. A puritan of puritans, he is, yet widely different from Anglican, Presbyterian, or Independent Puritan; ready indeed to dispute with these; interrupting at times with interjections, the services in the churches, or steeplehouses, as he called churches, and urging men and women to turn from their selfish, godless lives, and their theological and ecclesiastical substitutes for religion, to the inner life of goodwill, and the "inner light" of God and Christ shining in the depths of the soul.

To no one does this man say "Good morning," for to him there are, in God's providence, no bad mornings. To no one does he deign to raise his hat, for this was in his eyes, a hypocritical custom and affectation; nor will he conform to the conventionalism of saying

"You" to the rich, and "Thou" to the poor, but insisted on *Thouing* and *Theeing* rich and poor alike. No oath will he take, not even the oath of allegiance, loyal citizen though he is, for had not Jesus said, "Swear not at all."

Full of faith in his mission, George Fox does not fear to address and admonish the highest in the land—judges, magistrates, even Oliver Cromwell. And while ecclesiastical parties are ready to thrust their religious opinions down each others' throats at the point of the sword, this man is bold enough to assert that no one should be prosecuted for his religious opinions. While England is an armed camp, and brute force is worshipped as a God, and in the words of the historian Gardiner, "to butcher grown men only was fast becoming a mark of virtue," this man refuses a commission in the army, and denounces all war as contrary to the spirit of Christ, and in his own case carries out literally the injunction, "Whosoever shall smite thee on the right cheek, turn to him the other also."

Thrust again and again into "stinking" prisons, subjected to personal violence, he does not retaliate, nor does he swerve from his principles.

Fox has at times the appearance of a fanatic or a simpleton. His self-confidence borders on conceit, and his utterances at times sound extravagant. But his environment, the language of the day, the puritan atmosphere which he breathed, and the fanatical opposition he encountered have to be borne in mind. Were King, or Cromwell, Bishops, or Westminster Divines any less extravagant in *their* utterances, claiming to be miraculously appointed interpreters of the Divine Will?

Fox, like Spinoza, was "a God-intoxicated man," though he knew nothing of philosophy, science, biblical criticism, or the history of religion. He seemed to have seen deeper into the heart of the teaching of Jesus of Nazareth, and the essence of Religion, than his more learned and distinguished contemporaries. The student of psychology and of psycho-analysis would doubtless have found in him an interesting study.

Assailed, at first, by strange doubts and fears, as to whether there were a God, and whether all things did not "come by nature"—doubts and fears that he ascribed to the work of the devil—George Fox could find no anchorage for his mind and heart in "Prayer-book" or "Confession of Faith," or the prayers and teaching of Independents. What secret influences had, perhaps unconsciously stirred his soul? "I fasted much and walked abroad in solitary places, and often took my Bible, and went and sat in hollow trees and lonesome places, till night came on, and frequently in the night

walked mournfully about by myself, for I was a man of sorrows in the time of the first-working of the Lord in me."

Then George experienced what he called "openings." Like St. Paul, he heard a voice which said—"There is one even Christ Jesus that can speak to thy condition"; and "When I heard it my heart did leap for joy." These passages in Fox's *Diary* remind us of the experience of Carlyle when he passed from the "Everlasting Nay" and "Centre of Indifference" to "The Everlasting Yea," and the inspiring thought that the visible universe is "the garment of God woven at the whirring loom of time." A Divine "Seed" lies hidden in every human soul, and is drawn forth by the spiritual touch of Christ, as a flower is drawn forth from the dark imprisoning earth by the sunshine and the rain. "A spark disturbs our clod." This vision was too much for flesh and blood. Of St. Paul, it is written that "he fell to the ground," and for days lost eyesight. In like manner George Fox lay for days in trance. Are we not told something of the same kind about Mohammed?

Rags of the old puritan theology, doubtless, hung about Fox and his followers, but there was a new emphasis in the Christianity of "the Friends," and the old dogmas were relegated to the background. His message was—The Light that lighteth every man is shining now in fulness: open the eyes of the soul and behold the new heavens and the new earth.

George Fox may thus be said to have been a forerunner of the "Modernists" of to-day, although he did not realise what a revolution in religious thought and life was implied in his gospel, undermining as it did, the ecclesiasticism and theology of his times, and substituting for the orthodox ideal of "the Church" as a miraculously instituted hierarchy, and a theological club, the ideal of "the Friends" of the Christ of Love and Humanity. "The man in the leathern breeches" was a pioneer of modern religion, and "builded better than he knew," eccentricities and limitations notwithstanding.

In England, Scotland, Ireland, the West Indies, America, Holland, Germany, Fox travelled in days when travelling was not the luxury it now is, everywhere proclaiming the Gospel of the "Inner Light," and the immediate presence of God in the human soul. Truly a significant life, worthy of commemoration and forming an interesting chapter in the psychology of Religion.

IN MEMORIAM—F. H. BRADLEY, O.M.

By S. C. Lazarus, M.A., D.Phil., Lecturer in Philosophy.
University of Melbourne.

THERE is probably not a philosopher anywhere who could call himself a Bradleian without grave reservations. Yet there was certainly no philosopher in the British Empire who did not feel when Bradley was decorated last June, that Philosophy had been honoured in the person of her foremost representative. Bradley was a modest man, by conviction. Towards the end of his life he wrote that he regarded the "claim to originality" with "something like contempt." Yet even he could not have disclaimed his own part in the continuous rise of English thought from the dead-level mediocrity of the sixties and seventies. He was the giant of the Idealist onslaught on Empiricism, and when the fresh young warriors of Pragmatism and Realism came to stand in the places of Mill and Bain, it was upon Bradley's sword that their own weapons were tried and tested. For over twenty years he took part in every major controversy, and there was not a single philosophic issue which did not rest the clearer for his contribution. Other men, who stood closer to the line of the great Idealist tradition, may have made more converts, founded more "schools," done more to bring it about that for forty years Oxford should send out Hegelians to fill the academic Chairs of England. But Bradley carved his own way and fought his own fights; he began in the isolation of novelty, he ended in the isolation of preëminence. Always there was in his work that note of personal hardihood and vigour, alike in the pursuit of thought "to the bitter end" and in the steadfast allegiance to the reality of the vision seen. Because he would not compromise that allegiance, yet would not abrogate a jot of the rights of thought in its own domain, his books show signs of a dualism which explains his own certainty that he was no Hegelian, his doubt whether he was even an Idealist. Despite Bosanquet's cogent criticisms of these strayings from the fold, they lend to his work just that savour of life, conflict, deep-stained feeling, which makes it literature as well as Philosophy—the expression not only of a great intellect but of a great personality.

Consider the famous passage at the end of the *Logic*. For two volumes Bradley has laboured to dissect the life of thought, to show it as the organic activity of a single function instead of the laboured mechanism of external association. Here was the time for the Idealist, his case proven, his beloved syntheses established all along

the line, to sing a final paean of gnostic triumph. But hark to Bradley:

"It may come from a failure in my metaphysics, or from a weakness of the flesh that continues to blind me, but the notion that existence could be the same as understanding strikes as cold and ghostlike as the dreariest materialism. That the glory of this world in the end is appearance leaves the world more glorious, if we feel it is a show of some fuller splendour; but the sensuous curtain is a deception and a cheat, if it hides some colourless movement of atoms, some spectral woof of impalpable abstractions, or unearthly ballet of bloodless categories. Though dragged to such conclusions we cannot embrace them. Our principles may be true, but they are not reality. They no more *make* that whole which commands our devotion, than some shredded dissection of human tatters *is* that warm and breathing beauty of flesh which our hearts found delightful."

"There's blood in this. Look, if you prick him, he'll bleed." And there is blood at all times in the living style which can so perfectly compass the expression of Bradley's complex arguments and complex temperament. Except for Bradley, the stylists of modern Anglo-Saxon thought all belong to the philosophic Left—Huxley, Tyndall, James, Russell, Schiller. He alone among idealists consistently avoids jargon, consistently achieves both sinewy strength and limpid clearness, and continually proves his possession of that rare infirmity among philosophers, a sense of humour. All the extracts from his notebook published in the preface to "Appearance and Reality" are epigrams of a first-rate order. And he has made at least two jests that will live as long as the systems against which they were directed. There was Spencer's Unknowable, which must be taken for God, because no one knew what the Devil it might be; and there was the request, during Bradley's battle with Schiller over Pragmatism, that Professor James should "remind his followers on this side of the Atlantic that, of course without prejudice to the future, is it not yet true that the crowing of the cock brings the sun above the horizon."

Indeed, the whole controversy, on both sides, is a polemical gem. When Bradley hit he hit hard, leaving no doubt that he meant a blow, which had a definite mark. Yet there is no arrogance, no impatience of criticism, when he is sure the criticism rests on no misunderstanding. In a sense his whole philosophical development, at any rate from 1883 when the *Logic* appeared, to 1922 when it was amended and re-issued, is the story of how he came to modify his thought under the influence of Bosanquet, for whom he always expressed the highest admiration, and with whom he claimed a perfect agreement that readers of both could not always perceive.

The time has gone by for a critical discussion of Bradley's thought. One who was the subject of so many expositions and the object of so many attacks during his lifetime, can do without more explanation and more criticism on the immediate occasion of his death. And probably the time has not yet come to see his thought altogether in its place in the thought of his age, for though *Appear-*

ance and Reality came nearly two generations ago it would be rash to assume that the Idealist leaven has completed its work. We know now what Bradley's work meant in the last century. In another ten years, perhaps, we shall be able to see what it meant in this.

Meanwhile, to this recluse who felt so keenly the meaning of joy and beauty in the life of a world which he hardly saw, to this thinker who could give up his life to thought without proclaiming that Thought was all-in-all, to this virile mind and rich personality, we make our offering of homage and gratitude.

NOTES BY THE WAY.

The Finite Universe.

No. 14

The first attractions in our contemplation of the stars are the ideas of vastness and of infinity. Nordmann (in the *Kingdom of the Heavens*) has shown us how puerile is the one and how incorrect is the other. The stars are systematized into groups, and those groups into what might be called separate universes. These universes, groups, and stars are divided not by our friendly blue sky, but by black, terrible nothingness. The blue sky is only a little local phenomenon caused by our own atmosphere. It is a momentary trick of light playing on earth's breath. The Milky Way is such a universe, and all the stars of our heaven, including ourselves and our sun, are part of this galaxy, which winds upward in the form of a spiral. The sun is a tiny dying flame amid the myriad luminaries of the Galactic Universe, this bee-swarm which our telescopes separate out into suns. Myriads are visible; but untold more myriads float derelict and unseen in the black void, burnt-out monsters. Beyond this sidereal metropolis stretches that unimaginable nothingness. That is not the end. Our telescopes have traced faint mists, like little snail-shell spirals of vapour, fading away, more and more remote. Each of these is another universe of suns like our Milky Way. The faint light which reaches us from them has taken 40,000 years to percolate through the void, travelling at 156,000 miles per second.

There is only one thing able to canopy such revelation of space—the mind of man which measures it.

Can anything bound such conceptions? Einstein has used them as his elementary hypotheses, and by his calculations unifying the work of such predecessors as Mach, Henri Poincaré and others, has proved this illimitable scheme of things to be finite; illimitable, but finite; bounded in space which knows no straight line. Light shall no longer be a sword. It has become a caress which curves round and enfolds us. Travelling at its incredible speed, it takes 900 million years to encircle this Continental All. We seem to be creeping back to mediaeval vision. Dante's *Paradiso* is proven by geometry, and in the highest reaches of human thought, art and science unite, and make man Surveyor of the Universe.

Richard Church in the *Spectator*

DISCUSSIONS AND REPORTS.

I.—THE RIDDLE OF LAW IN A CIVILISED SOCIETY.*

By W. Jethro Brown, L.L.D., D. Litt., President of the
South Australian Industrial Board.

I propound a riddle, not a solution. A "Round Table" Society exists for discussion. Active rather than recipient, it will neither ask nor expect apology on my part. I may seem less deferential if I pause to emphasise the fact that law is a riddle. Superficial solutions are easy and varying. Take "the man in the street"—that elusive objectivity—if you can find him. Take legislators of different parties, or even of the same party. How divergent the points of view! Even if you interrogate lawyers, the answers would differ strangely. Perhaps the most common answer would be that law is a precarious means of gaining a livelihood. The habitual criminal might view law as the chief obstacle in the way of passing through life comfortably. Doubtless, to a man condemned to be hanged, law is a calamity. To all of us, law is at times a nuisance. If the members of the Society I have now the honor to address were to write down what they think law is for—its origin, meaning and purpose—what would they write? Discordancies would be inevitable, though I may be permitted to hope that the view of the habitual criminal would not find expression. That answers should vary in different ages and different races seems natural. Alas, they vary with different individuals of the same environment and time, and even with the same individual at different times, if only as costs are for Plaintiff or Defendant. Relativity!

In a democratic community, every elector should attempt an intelligible solution to the riddle I propound. His views on the alluring promises of the aspiring legislator should be more easy, if not less inaccurate. You may think me jesting. I am not. The law which exists is really an important matter in the ordering of our lives. I am less obvious when I say that law is, or tends to be, what a people think it is, or what it should be. Take, as a collateral illustration of my meaning of the importance of view-point, the daily meals. By some regarded as a mere means of nutrition, to others they are agreeable variations in the daily round. If you take two individuals of these classes, the divergencies should prove instructive if not diverting. The one perhaps thinks, if he thinks at all, in terms of proteins, calories, and vitamins. The other may dwell on decorative schemes, gratification to the palate, and other flights of epicurean imagination. In the actual process of meals, while the one is apt to swallow swiftly, the other loiters in a dilettante manner—especially over the walnuts and the wine.

Take, again, popular views of the art of life. A visitant from another planet would be puzzled to say whether the supreme object of

* Read before the Parkin Round Table Society, for the discussion of social and economic questions, Adelaide, Oct., 1924.

our educational system were to teach individuals to *know*, or to *think* or to *live*. Let us be charitable. But also veracious. The occasional thought given to the question of the art of life, is usually at the point of the bayonet. (I mean in moments of crisis.) Can any one be expected to be intelligent at the point of the bayonet? We pay the penalty. Most of our ills are due to a quite unpardonable stupidity. We go through life with about as much discrimination as a fly wanders inside a bottle. "Be good sweet maid, and let who will be clever." As if a maid could be good without being clever. She need not be cunning; but she must *think*. And think clearly. The question of what is good and what is bad cannot be divorced from the consequence of conduct. The purview of consequence implies an intelligent appreciation of results to others and to one-self. "Let justice be done though the heavens fall!" How well it sounds? But, here again, the question of what is justice has to be faced. The question can never be answered infallibly, except perhaps by the incurably stupid.

You may think me dilatory in coming to my main subject. But, as you must know, we all suffer more or less from that mental inertia which seeks to dodge a problem by tacit denial of its existence. Some people may succeed. Verily, they are of the elect! The danger is that of piling up trouble for the future. And believe me, if an appreciation of the art of life is necessary, so is a reasoned view of law. When I speak of a reasoned view of law I do not, of necessity, mean something esoteric. I believe there is such a thing as common sense, while prepared to concede that alleged expressions of it in ordinary life afford ground for scepticism. I go so far in my credulity as to ask you to assume that there is a commonsense way of looking at law. In order to suggest lines of discussion, I propose to refer you to a recent book by Roscoe Pound, on "Interpretations of Legal History." The book may not contain much that is new. I cannot agree with all the author says, but it is a useful summary of the ways in which various schools of thinkers have thought about law. The first chapter reviews the work of the historical school of jurists. The school regarded law as something which had *grown*. Needless to say growth is one thing, development another. The reconciliation of social stability and legal change was sought in the establishment of *principles of growth*. Law was something which had proceeded, and would continue to proceed, along fixed lines, much as the oak grows out of the acorn. You will appreciate a possible danger of such a view of human laws. To the indiscriminating mind, while it explains much in the problems of past and present, it may use the past to paralyse the present. As Maitland said of a famous decision of the House of Lords, "The weight of the dead hand fell with resounding smack upon the living body." My present point, however, is that the historical school of jurists really did affect legal development and the laws we live under because of a way of looking at law. The way may have been good, bad, or mixed. In any case, it has been potent in statutory enactment, judicial decision, and popular thought.

I pass from historical to ethical or religious interpretations of law. If you adopt one or other of the many ethical or religious interpretations of law, you will be necessarily affected in your view, not only as to what law should be, but even as to what existing law is. If you accept an ethical interpretation, you are almost unavoidably led into the realm of metaphysics. If you accept the religious interpretation, your pathway ends in the realms of dogmatic theology. Unless you are very reticent. You may, for example, even postulate a growing God—a convenient contribution to the solution of many legal as well as theological problems. I desire to criticise neither the ethical nor the religious view of law. I merely wish to draw attention to the fact that they have existed, and are likely to continue.

Most people are more familiar with the *political* interpretation—the *realization of freedom*. I need not say that freedom is a vague word, or that the best means of realising freedom, however you understand it, evoke divergences of opinion. Individualism and collectivism, though these terms may have an ethical or economic connotation, are very commonly thought of in relation to law as terms expressive of views as to means by which the political ruler may best ensure free scope for the development of the life of the citizen.

Modern knowledge of group psychology and the origin of the species have led to ethnological and biological interpretations. The ethnological interprets law and legal history in terms of race psychology or race institutions. The biological interprets them in terms of the struggle for existence and the survival of the fittest. The resulting influences may not be obvious; but they have been real. I am reminded of the Anglican Bishop who said he did not care who made law, so long as he had the right to interpret it. Neither ethnologist nor biologist may be statesman or lawyer. But the New Worlds they have discovered have aroused the imagination, and affected the thought, of all classes. Jurists, not the least, have found new and startling analogies. Sometimes, to support preposterous conclusions. More often, the analogy has been useful as a means of explaining some baffling perplexity. So things may be in time to come with the revelations of latter day physicists, psychoanalysts and bio-chemists. Every new and great discovery in science, especially if dramatic and far-reaching, provokes or invites a re-shaping of traditional knowledge. Speaking of ethnology and biology, distinguishable schools of jurists have sought to re-shape the new material of law. The meaning and scope of particular rules of law have been affected. The fact that lawyers and judges are often quite unconscious of the influence only goes to show that they are human, as, I suppose, are legislators.

More far reaching results have been anticipated from the economic interpretation of law, especially associated with Karl Marx, and involving what is called the social question—a question consequent upon the change from an agricultural commercial to an industrial economy, and the rise of the industrial labourers as a class conscious group urging new demands. According to the interpretation, the goal in view is not

ethical, or political, or biological, but economic—a maximum satisfaction of material wants. The dialectic of the needs or the wants of man replaces the dialectic of freedom. The statement that we are all socialists in these days, is presumptively an allusion, less to any definite scheme of social re-organisation, than to popular views of the end of law and government—views which have been reflected both in the making of law and in its administration.

I pass to the Great Lawyer interpretation. There are times or periods when some eminent jurist or judge, by his manipulation of ancient material, or his views of existing necessities, has given law a new content. Legal development is represented as discontinuous. Like an electron, or a flea, it crawls and then hops. The hops are those important epochs when some great personality gets to work on the raw material of law. Coke is a famous example. His interpretation of mediaeval law has been shown to be false historically. The fact did not prevent it from becoming law. And continuing to be law. The names of Moses, Lycurgus, Justinian, Mansfield, and Bentham may be selected at random to illustrate the potency of the great personality. In a British society of to-day, with popular education and democratic institutions, the great personality interpretation may seem an anachronism. But the possession by a nation of a few intellectual giants may possibly be of more value to the community than a moderately high general average. I make the statement, not to express an opinion, but to illustrate a kind of interpretation.

Roscoe Pound, to whose work I have already referred, pleads for an engineering interpretation of law. All interpretations, he says, go on analogies. We seek to understand one thing by comparing it with another. He urges us to think of legal institutions not merely as things that are, but as things that mind fashions; not merely as things that have come to us, but as things that are made at some time, and are made now by those who believe in them and will them. He, of course, concedes that the creative activity is conditioned by circumstances of time and place, but concludes that the best analogy is afforded by engineering. Engineering, he argues, is thought of as a process, as an activity, not merely as a body of knowledge, or as a fixed order of construction. It is in the doing of things, not a serving of a passive instrument through which mechanical formulas and mechanical laws realise themselves in an eternally appointed way. As an engineer is judged by what he *does*, so a legal system must be judged by how it *works*.

So much by way of a summary of some legal interpretations. Needless to say, if you were to study the judgments of judges, or the works of jurists, or the laws of legislators, or the opinions of electors, you would find many variants and combinations. No two people think quite the same. The riddle which I seek now to propound is how we who are living in a particular State, at a particular time, should view the law we live under, and which changes from time to time. Innumerable are the organic filaments which bind a society together. I speak

of legal filaments, their meaning, origin, and purpose. You may not be lawyers; but you live under laws which shape in multitudinous ways the life you shall live. What those laws are or will be depends largely on the view of the nature of law. Merely to face a problem is to be on the way to solve it. Even to realise that it is a problem is a sign of hope. I am sure that you will realise that it is a problem, and I am here to ask you to face and discuss it.

To be more concrete, I submit certain questions:—Does law grow? Is it made? Ought we to combine analogies? If so, how? And with what relative emphasis? In any case, how will our viewpoint affect us when we come to consider such particular questions as prohibition, the propriety of admitting women to act as jurors or legislators, the need for a lethal chamber at the public expense and under public control, and the general principles upon which such public authority should proceed, Eugenics, negative and positive?

I do not suggest a discussion of such subjects. I only mention them to illustrate the fact that the conclusions we hold on many debatable matters are due to pre-conceptions as to the nature, meaning, and purposes of law—pre-conceptions of which we may not be consciously aware—pre-conceptions of which we have never seriously considered the validity or value—pre-conceptions of which we should often be ashamed if we only realised their implications.

II.—CHRISTIANITY AND THE COMMON LAW.

By C. K. Allen, B.A. (Syd.). Fellow of University College, Oxford.

FOR centuries it has been a favourite platitude of lawyers and laymen alike that "Christianity is part of the law of England." It was not until 1917 that the aphorism was critically examined by a Court of law. In that year, in the case of *Bowman v The Secular Society*, it was considered by the House of Lords, and the conclusion arrived at in the most elaborate opinion delivered is as follows:—

"With all respect to the great names of the lawyers who have used it, the phrase 'Christianity is part of the law of England' is really not law; it is rhetoric, as truly so as was Erskine's peroration when prosecuting Williams: 'No man can be expected to be faithful to the authority of man, who revolts against the Government of God.' One asks what part of our law may Christianity be, and what part of Christianity may it be that is part of our law? Best C.J. once said in *Bird v Holbrook* (a case of injury by setting a spring gun): 'There is no act which Christianity forbids, that the law will not reach: if it were otherwise, Christianity would not be, as it has always been held to be, part of the law of England'; but this was rhetoric too. Spring guns, indeed, were got rid of, not by Christianity, but by Act of Parliament. 'Thou shalt not steal' is part of our law. 'Thou shalt not commit adultery' is part of our law, but another part. 'Thou shalt love thy neighbour as thyself' is not part of our law at all. Christianity has tolerated

chattel slavery; not so the present law of England. Ours is, and always has been, a Christian state. The English family is built on Christian ideas, and if the national religion is not Christian, there is none. English law may well be called a Christian law, but we apply many of its rules and many of its principles, with equal justice and equally good government, in heathen communities, and its sanctions, even in Courts of conscience, are material and not spiritual."

Apart from ecclesiastical law, and statutes generated in times past by religious factions, *dogmatic* Christianity has never been part of the Common Law. The term "Christianity" has constantly been used by lawyers in former times as a somewhat loose generalization for the fundamental principles of ethics which underlie all enlightened legal systems. "The Law of God" and the "Law of Nature" were for ages similarly used, not because they represented definite legal conceptions, but, as Lord Sumner observed in the case above referred to, because they were "merely prayed in aid of the general system or to give respectability to propositions for which no authority in point could be found." Even "Thou shalt not steal" and "Thou shalt not commit adultery" are not part of our law *because* they are Christian precepts. It is difficult to imagine any system of law, however primitive, which does not restrain and punish theft; and adultery is visited with far more severe penalties among many savage tribes than it is in England to-day. It is one of the most persistent assumptions of the doctrinaire to suppose that every useful social rule is the direct product of his particular doctrine. In any legal system whatever, many legal principles are certain to coincide with principles of religion, because both spring from the innate sense of right, and often the innate sense of utility in man.

Even marriage itself, though usually a Christian ceremony, is not necessarily so. We appear to have been always a monogamous people, but that we were and are so by reason of Christian teaching there is nothing to prove. Why some peoples should be monogamous and some polygamous (some patriarchal and some matriarchal, some endogamous, and some exogamous, and seems likely to remain a mystery. The Anglo-Saxons appear to have been monogamous before the acceptance of Christianity, but after that event the religious ceremonial accompanying marriage naturally became Christian. So it has remained. And since there is an Established Christian Church in England, the use of religious rites is sanctioned and regulated by statute, if the parties choose to adopt such rites. But it hardly needs to be pointed out that religious ceremonial, though customary (just as the other familiar accompaniments of a wedding are customary), is in no sense legally necessary. The parties have only to appear with witnesses before a duly constituted authority, pay a fee, and pronounce these simple words: "I do solemnly declare, that I know not of any lawful impediment why I, A.B., may not be joined in matrimony to C.D., and I call upon these persons here present to witness that I, A.B., do take thee, C.D., to be my lawful wedded wife (or husband);" and thereupon the legal bond is complete. Truly does the Roman maxim

apply to our modern Christian state—*consensus facit nuptias*! Whatever the jurisdiction of the Church may have been in the past, the rights and duties of spouses in England to-day depend not on any religious canons, but on the *vinculum juris* of a sanctioned act-in-the-law.

Monogamy, however, we uphold not only by making bigamy a crime, but by refusing to recognise polygamous marriages as valid in our Courts. Such, at least, appears to be the better legal opinion. To be recognised by our law, a foreign marriage must be formed on the same basis as marriages throughout Christendom, and be in its essence "the voluntary union of one man and one woman to the exclusion of all others." But in laying down this proposition, the law is concerned not so much with the religious aspect of marriage, nor with the question whether polygamy is shocking to the English conscience, as with the practical inconveniences of attempting to adapt a monogamous to a polygamous system. "We have in England no law framed on the scale of polygamy, or adjusted to its requirements," says a learned judge. It would be farcical, for example, to apply to a harem our law of matrimonial offences, or of alimony. Each new member of the seraglio would, according to our law, involve the husband in "adultery coupled with bigamy"! In view of these practical consequences of attempting to fit the square peg into the round hole, it is hardly necessary for an English lawyer to consider the abstract ethics of polygamy as against monogamy.

If there is little in our law to show that the ordinary member of the community is expected to be a follower of the Christian religion, there is still less to show that he is assumed to be a member of the Church of England. The contrary opinion is popularly held, but there seems to be little justification for it in the law. There is, indeed, great doubt as to what constitutes membership of the Church. There appears to only one direct *ex cathedra* statement on the subject: both judges and writers on ecclesiastical law have been studious to avoid a definition. In one case, however, the issue was raised "nakedly," as lawyers say, by a trust the benefit of which was to be enjoyed only by members of the Church of England. Mr. Justice Stirling defined a member of the Church of England for the purposes of this trust as "a person who has been baptized, has been confirmed, or is ready and desirous to be confirmed, and is an actual communicant." If this definition be correct—and it is hard to find any other—it is obvious that there are many Englishmen who, even though they do not profess any other religion, cannot be legally considered members of the Church of England.

But a "member" is not the same thing as a "parishioner." The latter is simply a person who resides or lodges in a parish, or, without residing, pays rates on a house or land in the parish. The term therefore would seem to include all inhabitants of England and Wales; and by this slender qualification alone, apart from his religious convictions, the parishioner is entitled to "seat and sepulture in his parish church and churchyard." Any person who prevents him from attending the church (apparently whatever the seating accommodation may

be!) hinders him in the exercise of a common right, and does so at his peril. The policy of the law seems to be that whether a man be a member of the Church or not, at least the Means of Grace shall never be wanting.

If a man is a member of the Church of England, as defined by Mr. Justice Stirling, and apparently also if he is merely a "parishioner" who has never professed any dogmatic faith, it is not only his legal right but his legal duty to go to Church every Sunday, and unless he has reasonable excuse for not doing so, he incurs certain spiritual censures. This state of the law comes about by a curious process of muddled legislation. An Act of Edward VI. commanded all persons inhabiting this realm (to put it shortly) to go to Church every Sunday, upon pain, in default of reasonable excuse, of punishment by the censures of the Church. (Presumably the normal punishment of this kind would be standing in a white sheet at the door of the parish church). It was repealed by Mary, but restored by Elizabeth, with the addition that anybody who did not attend divine service was to be fined one shilling for every omission. Then the Toleration Act, 1688, freed all persons from the penalties imposed by earlier legislation if they went through certain forms on Sunday; the result being that everybody was obliged to go to church unless he came within the Toleration Act. In 1845 came the Religious Disabilities Act, which repealed the statute of Elizabeth but did not repeal the statute of Edward VI.; and provided that nobody dissenting from the Church of England should be liable to any penalties at all. The result therefore at the present time is that dissenters are not liable to any penalties for non-attendance at the established church, but members of the Church of England are brought under the old spiritual penalties of Edward VI., though relieved of Elizabeth's shilling fine. Imagination reels at the censures which have now accumulated on the heads of many Laodiceans.

—Carleton Kemp Allen.

III.—STEREOSCOPIC AND PSEUDOSCOPIC VISION AND CONVERGENCE. SOME NEW LABORATORY EXPERIMENTS.

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The usual laboratory work in this field includes the use of a stereoscope and slides, the construction by students of somewhat doubtful drawings, and the use of a pseudoscope and models. Only one student may, at one given time, use these pieces of apparatus, and so, where a large number work together in a laboratory, this is a great disadvantage. Again, the experiment is indirect, since the student is only able to work successfully through prepared material. The following experiment is simple and inexpensive, and moreover is direct, being based on the results of the experimenter's own drawings, and is thus strongest where the accepted form is weakest. It depends on the

principle that has recently been exploited in the form of postcards, adapted as an illusion on the vaudeville stage, and finally developed in the "*anaglyphs*" which have formed a feature of late in some of the French and English illustrated weeklies. The principle of operation is exceedingly simple. Two stereoscopic prints are made in separate colours—generally red and green—on the one sheet. One so overlaps the other that the two are in the position of the object as seen by each eye. Observed with the naked eye the print looks blotchy and repellent; if however it be examined with red and green gelatin light filters, the red gelatin blocks out the red image and the green acts similarly with the other. The corresponding gelatin filter must be fitted to the correct eye so that each eye receives its own separate picture as in the stereoscope. If the gelatin filters be reversed the result should be pseudoscopic, but as the subjects presented are generally either animal or human, this cannot be observed, since the mind cannot conceive of a hollow living being. It is the principle used in the preparation of the anaglyphs that was applied in these exercises, and the results obtained were so good that it appeared desirable to make them known to interested laboratory workers.

Sheets of dark red and dark green gelatin were first procured from a cinema supply house. Green and red inks were then watered down with boiled water until either colour when smeared on paper was indistinguishable through the similarly tinted gelatin. For this purpose ordinary commercial red ink was found to be satisfactory, but the only green found to be of a correct shade was draughtsmen's ink. Lines of the figures were drawn not with a pen but with pointed sticks. After the stick was used for a time it was found desirable to re-sharpen it, since the soft wood absorbed the moisture and left the ink dried about the point, and a dark line was the result.

Drawings for each eye were made by marking the positions of each object on a sheet of glass about 4" x 4". This was placed at right angles to the line of direct vision, being held in the clamp of a retort stand, with a thick card pad to take off the direct bite of the metal; eventually a wooden holder was used for this. The experimenter sat about 12" to 15" from the glass, and, with a sharply pointed sliver of soap, marked the terminal points of the object on the glass. Soap on glass will give a clear white mark that can easily be washed off; it is in all respects far better than the china-marking pencil that was originally used—the latter being difficult to manipulate easily in cold weather. A headrest was used, but better still, a piece of card with two holes punched for the eyes was placed in position when very exact work was desired. Very good initial drawings were however obtained even without these aids if the experimenter worked rapidly and without moving his head position when "changing eyes." The points on the glass were then transferred to a thin paper, by clipping the two together and holding them to the light, the points then being very lightly marked on the paper with pencil. These were then joined up by lines of the required thickness. Care was exercised so that each image was lined in

with the same colour. As a line was ruled it was found best to dry it with blotting paper, so that it did not dry out in too dark a shade. Again it was found that the drawing in one colour must be perfectly dry before the second colour was applied, in order that the new colour should not run along the lines of the former.

When the light filters were used for each eye so as to give it its correct image, *stereoscopic* effects were obtained, when reversed a *pseudoscopic* or reversed image resulted. Our best effects were secured by rolling thin cardboard into tubes, blackening the insides, and then fitting a piece of red or green gelatin to one end. Our best tubes were finally made of the cardboard containers of upright gas-mantles. When the ends of these have a round piece cut in them they hold the gelatin pieces excellently. Each one of a pair of tubes was bound about its centre by a small $\frac{1}{2}$ " strip of tinned iron, with a lug left to project about 1". The projecting pieces were drilled near their ends, and fastened together with a small brass bolt which allowed the tubes to be converged upon the drawing. They thus acted as a simple pair of binoculars, recording the angle of convergence.

In order to demonstrate the principle that living forms will not come under the head of pseudoscopic vision, rough overlapped drawings of a face were made by each student, and pictures from the illustrated papers abovementioned were observed in addition. The objects for projection most successfully used were all rectilinear since it was difficult to mark the curves of a cone upon glass, though this was achieved when some care was exercised. They consisted of:—

- (a) a straight bar,
- (b) a cross,
- (c) a square of card,
- (d) a regular pyramid, and
- (e) A truncated pyramid.

The bar consisted of a thick wooden match, about $2\frac{1}{2}$ " long, and $\frac{1}{8}$ " in thickness. It was stuck on the end of a pin about half an inch from the glass.

The cross was made of two of the wooden matches notched at the point of section and held together by a pin. One of the ends of the cross-piece touched the glass while the other was about $\frac{1}{2}$ " away. Neither the bar nor the cross gave the best pseudoscopic effect, but if one imagined them in this case as loopholes in a wall, the effect was helpful and they tended to fuse better.

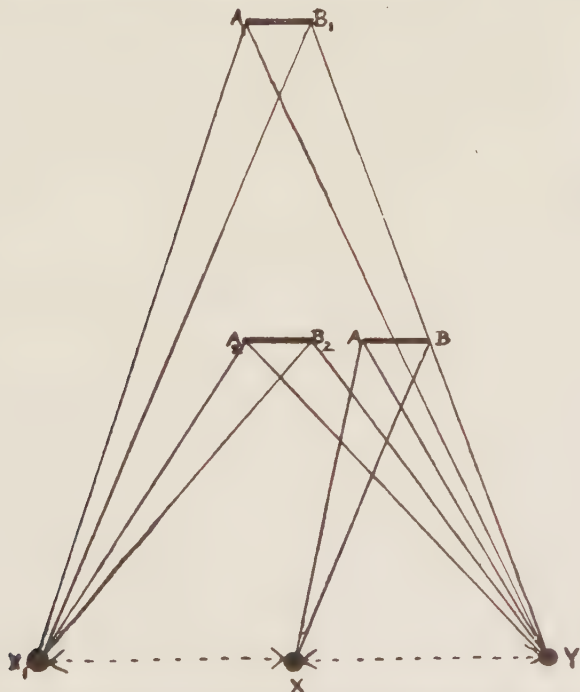
A piece of thick card about 2" square was arranged so that its diagonals formed the arms of an upright cross. One of the ends of the cross touched the glass as in the previous arrangement. When the drawing was lightly shaded the effect was greatly enhanced, the shadings of course overlapping. Viewed pseudoscopically the square had a curiously hollow effect.

A regular pyramid with a base about $2\frac{1}{2}$ " was placed slightly askew. The point touched the glass, the edge was slightly out of perpendicular and its edge slightly away from the horizontal. It was held by a long

thin nail projecting from the middle of its base. When on completion two of the corresponding sides were shaded in each drawing the effects were much better. Both forms of vision showed perfectly in this example, the reverse effect alternating with the direct form on changing the colours of the binoculars.

The truncated portion of the last example was placed close against the glass, and its position was similar in general to that of the regular pyramid. This, too, gave perfect results, both directly and reversed.

In addition rather strange effects were observed when some of the "Titchener" series of stereoscopic slides were imitated. For instance, a green circle was drawn in a hollow square of red, so that the circle was slightly within the inner sides of the square. The circle was given a second coat of green, so that it did not disappear with the green eye-piece. The mixed effect of stereoscopy and binocular rivalry added a peculiarly "live" effect to the circle, making it to appear to move back and fro as if struggling to get out of the square.



The principle of convergence was also demonstrated very simply and effectively. It is worked on the principle of a diagram (see Fig.). A picture of the object in position A—B is taken with X and Y as the normal distance between the eyes. When the distance is increased to twice the normal distance between the eyes from X to X₁, then when the object is moved back proportionally to the position, A₁—B₁, i.e.,

to twice the original distance the resultant drawing is similar to the original. If, on the other hand, a drawing be made from the points X_1 and Y with the object at the original distance in position, A_2-B_2 , it then appears stereoscopically closer owing to the greater angle of convergence. The screen for the eyes was made of a strip of card about 2" by 8", with holes punched at the required distances. It was affixed with drawing pins to a thin stick of wood, which was held horizontally in the clamp of a retort stand. This arrangement, with the eye holes X and Y , was also used in the earlier exercises.

As laboratory exercises the foregoing have commended themselves from two points of view. In the first place, the student may obtain excellent effects from his own drawings, which give the exact location of the image of each eye, and the pseudoscopic effect is obtained from the same drawings. The exercises may be used as an introduction to work with the stereoscope and pseudoscope. The principle of convergence is also directly demonstrated. The expense is confined to the purchase of a few sheets of clear glass, a small amount of coloured gelatin for eyepieces, and coloured inks. The remaining portions of the apparatus are either stock laboratory material or may be put together in a few minutes by students for themselves. The total cost is thus nominal. As a result they have been incorporated into our laboratory course and their adoption in other laboratories is confidently recommended.

REVIEWS.

PROLEGOMENA TO AN IDEALIST THEORY OF KNOWLEDGE. By Norman Kemp Smith, D.Phil., LL.D. MacMillan, 1924. Pp. XIII., 240. Published Price, 10/6.

The theory of knowledge has occupied a predominant position in philosophy since the time of Kant, with whom it might almost be said to have originated. Early philosophers constructed theories without raising the question whether the mind is competent to discover philosophical truth. This unquestioning faith in the philosophic capacity of the mind resulted in the production of rival systems, which, because of their incompatibility with one another and their exclusive claims to truth, induced a sceptical attitude. To escape this scepticism, Kant thought, the first task of the philosopher should be to determine the nature of human knowledge, its scope, limits, and certainty; and his own theory of knowledge was so remarkable that this view has been widely accepted. It is accepted by Professor Smith in the present work, which owes the general nature of its argument to Kant.

The book raises two main issues. *In the first place*, the author believes that a certain theory of knowledge, which he expounds, harmonizes with idealism as no other theory of knowledge seems to do; and by idealism he means any philosophy "maintaining that spiritual values have a determining voice in the ordering of the Universe" (p. 1). The opposite of idealism is naturalism, which holds of values that

they have come into existence at a late stage of the evolutionary process, and, though admitting that they now exercise "a predominating influence in human affairs" (p. 4) denies to them any larger significance. Idealistic philosophy, on the contrary, has as its most distinctive contention, the doctrine that spiritual values operate "on a cosmic scale" (p. 4). The opposition between idealism and naturalism may thus be regarded as the distinction between a religious and a secularist view of life, and Professor Smith holds that his theory of knowledge supports idealism. In the second place, there is the question of the adequacy of the theory of knowledge which is offered, quite apart from its relation to idealism. This theory is specially important as attempting to combine the Kantian conception of knowledge with the conclusions of physical science understood in the literal realistic sense in which the scientist normally understands them; and in the course of the exposition, valuable discussions are introduced on a variety of problems. The theory is complex, as any serious theory of knowledge must be, and little more than an indication of its conclusions can be given.

Using the term *sensa* to indicate the data of which we are directly aware in sensation, such as seen colours and heard sounds, it may be said that one of the most striking facts we meet in considering knowledge is the conflict between ordinary belief and scientific belief about colour *sensa*. We believe in ordinary life that we see colours spread out over physical objects and also that colours exist whether we see them or not. To science, however, physical objects are not coloured at all: colour *sensa* are merely effects of physical and physiological conditions, and apart from these have no existence. Nevertheless, *sensa* of all kinds, and especially colour *sensa*, seem to be the chief means we have of getting to know about the physical world. There thus grows up naturally a theory of knowledge called *representationism* according to which the real world is known, not directly, but only through *representatives*, the *sensa*, which are quite different from the things they represent.

Professor Smith is very opposed to all varieties of representationism. Nevertheless, it is difficult to escape this theory altogether. A drop of water consists of millions of discrete particles in violent motion, yet we see it as "a uniform whitish-coloured globule of seemingly continuous and quiescent matter" (p.p. 11-12). As this instance is typical, is it not beyond question that we know physical things through representatives, that is, through the *sensa*? In various parts of the book the view is expressed that the primary function of *sensa* is to help the animal organism to survive by indicating to it the presence of objects in its environment; and it is argued that, from the point of view of survival, it would be actually harmful if the organism were to apprehend physical reality as it really is. It is practically much more useful to apprehend a drop of water in the way we do than by seeing the millions of particles which really constitute it. Now, granting all this, how can it possibly be held that sensuous knowledge, at least, is not representative knowledge? And Professor Smith's statements amount to an admission that it is. Not only so; Professor

Smith admits, what is much more serious for the position he wishes to establish, that "though the independently real is tasted, smelt, and touched, and is apprehended through its radiations of sound, temperature, and light, we have no means of determining how far, or in what manner, any of these qualities may precisely match those with which it is intrinsically endowed" (p. 228).

There are, however, two realities which, on Professor Smith's theory, are known *directly*, namely, space and time. According to the representative theory, space and time apprehended by any individual are private, as the *sensa* are, and real space and time are known through these representatives. Professor Smith rejects this view. The process by which the real space and time are known he calls *intuiting*, and this is quite distinct from the process by which *sensa* are known, which he calls *sensing*. In the development of the argument, Professor Smith, in opposition to prominent psychologists such as Stumpf, Ward, Stout, and James, maintains that *sensa* are absolutely unextended. This reversion to the very view of Kant himself is one indication of the great influence of Kant on Professor Smith's thought; but the mere reference to some of those who hold or have held the opposite view is enough to show that it is a difficult view to sustain. It would not be sustained for a moment unless the evidence of introspective observation were regarded as illusory, for colour *sensa*, in particular, are *observed as extended* (cf p. 180). And no conclusive evidence for the unextended character of *sensa* is given. A case is certainly made out for a difference between sensing and intuiting, with regard to which the neurological investigations of Dr. Henry Head and his colleagues are extremely important. These investigations led to the conclusion that the physiological processes conditioning the *localisation* in space and time of certain cutaneous sensations are distinct from those conditioning the apprehension of these sensations *as mere qualities*. But even if we accept the distinction between sensing and intuiting, it does not follow that the objects of intuiting, space and time, are the public, independently real space and time. They might be in the same representative relation to the real space and time as the "uniform whitish-coloured globule" is to the millions of particles which physically constitute the drop of water. How, in any case, unextended *sensa* came to appear extended, it is extremely difficult to understand, as the author admits.

But although sensing and intuiting are different processes, they do not occur separately. *Sensa* can be apprehended only in connection with the intuition of space and time, and space and time can be intuited only "in terms of" *sensa*. Further, apprehension of *sensa* is also conditioned by certain categories, of which the two fundamental are totality (whole and part) and necessitation (p. 176). The argument here is of the well-known Kantian type: the apprehension of *sensa* is *conditioned* by the apprehension of space and time and certain categories. The simplest act of cognition thus consists of processes of sensing, intuiting, and categorial thinking, and in stating these we are

defining the essential nature of knowledge. The categories are held to be "concepts of features *constitutive of what is apprehended*" (p. 131), but they also have an important "regulative" role, the category of totality in particular providing us with our scientific and philosophical ideals.

The various points in the above argument would require detailed examination such as is beyond the scope of this review, and I shall therefore only raise the question of the relation of the theory as a whole to idealistic philosophy. As the author does not profess to do more than to suggest just how his theory supports idealism, the reader is obliged to fill out the argument himself, and the connection between the two is not easy to grasp. It surely is not simply because categories are involved in knowledge that this theory of knowledge supports the view that spiritual values operate cosmically. Subjectively the categories merely supply an essential part of the equipment of the mind for its apprehension of the real world. But this proves nothing about the cosmical efficacy of spiritual values. An important consideration is that in our attempts to obtain knowledge we are progressively successful, and this, Professor Smith seems to suppose, could only be so if our knowledge was not altogether representative, which, according to his theory, it is not. In other words, the fundamental categories give us scientific and philosophical ideals, which, since they may be progressively attained, are not vain and illusory. There is a kind of pre-established harmony between our ideals and the conditions of existence. Professor Smith regards this fact as of special significance. "Nature," he says, "creates man, endows him with theoretical as well as with other needs, and then progressively responds to these needs, the more he seeks her aid. Is not Nature here revealing herself?" p. 231). And he is full of admiration for the way it has all been done. The instrument given primarily for practical adaptation made possible the recognition of our greatest values (*ibid.*) It might be asked whether in principle this argument is not the older argument from design.

It will be obvious that Professor Smith has written an important book, and, that being so, it is worth while pointing out certain respects in which the exposition would benefit by greater fullness. (1) To begin with, the distinction between knowing "*in terms of*" and "*through*" *sensa*, is not defined, and is not clear, although the author considers it most important, holding that space and time are *not* known "*through*" *sensa* but only "*in terms of*" *sensa*. That this distinction needs definition is obvious in view of such a statement as that "the mind . . . cannot . . . intuit space save as sensibly embodied, and is therefore dependent throughout upon given *sensa*" (p. 194). To say that the apprehension of *sensa* and the intuition of space and time mutually condition each other by no means defines this distinction. (2) The term *subjective* is used to convey some important meaning which is nowhere stated. If we interpret this term in harmony with the definition of *subjectivism* (pp. 4-5), anything will be subjective which is *either* a representative in knowledge of other realities, *or* dependent

upon mind. Now Professor Smith holds that *sensa* are *not* subjective (p. 44), though all this seems to mean in the context is that they are objects in processes of sensory apprehension, which is quite compatible with their being *both* representatives in knowledge of other realities *and* dependent on mind. (3) It is implied that universals cannot be intuited (p. 138). This may be the true view; but as Russell, for instance, holds the opposite view (cf. *The Problems of Philosophy*, ch. X.), Professor Smith's view cannot be supposed to be in no need of proof. The issue here is by no means trivial. (4) The book is not clear as to the exact number of the categories and the exact character of each. We are once told that totality (whole and part) is "the basis of all the other categories" (p. 163). It is important to know just what this means, and the extent to which categories *less basic* than totality are necessary "to make experience possible." (5) Finally, the discussion is perhaps somewhat weakened at times by the desire to convince. For instance, in arguing against the associationist theory of the mind's continuous construction of its space-time world out of given and revived *sensa*, Professor Smith says that this theory would involve a "well-nigh incredible elaborateness of construction" and points out that his own theory is much simpler (p. 181). Now the application of Occam's razor generally carries plausibility, and in itself there would perhaps be no objection to it here. But Professor Smith's own theory of knowledge shews that awareness, which is introspectively apparently simple, is quite unexpectedly complex, and, possibly to show that this complexity does not throw suspicion on his theory, Professor Smith says that "All Nature's simplicities . . . mask the well-nigh incredible complexity of the manifold contributory factors which make them possible" (p. 189). Such alternation of standpoint is certainly confusing. We therefore look forward to that fuller statement of Professor Smith's philosophy which the title of the present work would lead us to expect.

—B. Muscio.

AN OUTLINE OF PSYCHOLOGY. By William McDougall. London. 1923. Methuen. 12/- net.

Psychology, we are now to understand, is a science. It is something to be "approached" through a "literature" by "the student." The latter will find this literature of various distinct sorts, (1) "researches"—special investigations of technical problems under a number of well-worn heads—"attention," "memory," "fatigue," etc., (2) a large number of works with the title "The Psychology of . . .," (3) a still larger number of books entitled "Psychology," with "Principles," "Outlines," etc., as variants. Most seasoned investigators of the first sort turn in time to writing books of the second class. But *all* of them seem sooner or later to write "Psychologies." This may in part be due to a natural demand. It is to the seasoned investigator that we look for the clear survey of the whole. But this will not explain the enormous number of "Psychologies." How many eminent investigators in other

fields busy themselves in writing text-books of Physics or Chemistry? One reason would seem to be the obstinacy of the philosophical tradition. It is still apt to be the ultimate issues that guide, and the ultimate beliefs that are at stake in, the selection and conduct of psychological researches, be they ever so dependent on metal instruments. Without such an outlook psychology is of all sciences the most illiberal. Nevertheless the claim to be "scientific" introduces a distinct qualification; the attempt is to get a definite body of positive knowledge independent of "speculation."

In the "Psychology" which Professor McDougall has now come to write there is an obvious and sustained attempt to make the best of both worlds. Notwithstanding that he maintains throughout his customary *de superiori* attitude to philosophy and philosophers, he is employed at the eminently philosophic task of working out a category for psychology. The subject, it seems, has never yet been clearly and consistently expounded under the principle of Purpose. The best manuals are still mechanistic in places. Still, McDougall considers his a wholly empirical standpoint—we simply find in Nature processes that are mechanical and other processes that are purposive. Reasons are here given for assigning all mental processes to the latter class, reasons put forward as the moral of current psychological and biological investigations over a very wide experimental field. The width of its scope, its argumentative character, and the depth of the theoretical questions it raises, should make the book most useful to students pursuing a course in Psychology at a rather advanced stage.

Mechanism as a theory in psychology has taken two main forms, both of which McDougall now rejects. 1. Atomistic associationism; the "idea" theory. On McDougall's showing there is indeed a purpose which explains the emergence in experience of what *looks like* atomic "sense-data," but its treatment comes late in a purposive psychology, and tells quite against the view that these are the elements of mind. 2. The reflex or "stimulus-response" theory; the apotheosis of "physiological psychology." Now it does not seem hard to see that this is the corollary of the former. But by many (including McDougall in the past) it was taken for an alternative, as putting the stress on action as against mere cognition. By its theories of "motor meaning" and the like it seemed to afford a sufficient explanation of cognition itself, while giving to psychologists, and their pedagogical and clerical satellites, unlimited scope for talking nonsense about the evils of "intellectualism." So it has required the atrocities of behaviourism, which he regards as their offspring, to convince McDougall of the affinity of the two points of view. Nothing can be stronger than Professor McDougall's language about behaviourism, even while he admits his own origination of the definition of Psychology in terms of behaviour only. But now he insists that reflex mechanisms are not the essence of mental structure.

The upshot in this book is an arrangement of topics for which "the student" will be grateful. He is not compelled to begin by struggling

with the *minutiae* of sensation, or the detailed structures of the nervous system. Discussions of the mental functions of the latter, to which McDougall has himself contributed so many investigations, are now mostly relegated to the footnotes and carefully labelled "speculation." The question of "Mind and Body" is dismissed for treatment in a subsequent volume which is to deal with Abnormal Psychology.

The way is cleared for the development of a truly "hormic" psychology; what we might call a psychology of Push and Go. In its working principles McDougall's has a certain *prima facie* resemblance to the biological psychology of Aristotle. Thus he makes throughout a fundamental distinction between mental structure and function. For example, actual belief is distinguished as (like doubt) an emotion from beliefs, which are "cognitive dispositions." Psychology, then, becomes once more primarily the study of the *psyche* rather than of consciousness or its states. The path of exposition lies through lower-animal behaviour to human, but not so much with the object of showing in the former the elements of the latter, as of tracing in both the same essential tendencies. These are Instinct and Intelligence. In a striking and far-flung argument the results of recent biology are marshalled to show that Intelligence is a characteristic of even the lowest forms of organic behaviour. The traditional inverse ratio is attributed to the confusion of instincts with reflex mechanisms, a distinction which McDougall admits his previous works do not sufficiently reveal, but which he now makes quite fundamental. Yet he still ascribes to Intelligence a purely subservient character. The instincts are the only "drives."

The author enters again the field of so many interesting adventures in cross-division, the classification of the instincts. We must recognise "the instincts." On this point McDougall is adamant. They are the structure of mind. He believes they are Mendellian units. Some day soon they will be differentially measured in individuals. No more, then, will he follow Dewey in reducing them to Instinct than he will follow Jung in dispersing them over a general urge. A notable addition to the list in the present volume is Laughter. On McDougall's theory this is not, as with Hobbes, a matter of triumph or "sudden glory," but rather exists to counterbalance our primitive sympathy. We laugh that we may not weep. Most of the jokes in this book, however, would rather illustrate a theory of the Hobbist type. On p. 422 McDougall lets pass a fine opportunity to introduce an example of the right sort, in connection with his affecting account of the death of the stray dog.

The position with regard to Instinct, we would urge, seems to be that it is only if we take up the view of Intelligence as purely subsidiary that the theory of "the instincts" is plausible. We would further suggest that animal behaviour, the supposedly outstanding case of separate instincts with actions in a one-one relation thereto, is so only from the abstractly introspective standpoint which McDougall has so often condemned. What differentiates instincts from reflex

mechanisms with him is just the greater generality of the former. Yet he is still obliged by his theory to maintain the essential specificity of instincts. Where to draw the line? We are told that *an* instinct is a *conative* disposition, or effective-conative. (Though, as in the "Social Psychology," we are somewhat confused by the other statement that what is instinctive is some connections between specific cognitive and specific effective-conative dispositions.) We may fail, then, to carry out any particular line of instinctive *action* but nothing beats a *trial*. Up to *that* point the instinct has all the infallibility of pure mechanism. Beyond it Intelligence must come to the rescue. At this rate Intelligence has a fair claim to be the ground of the specificity attributed to "the instincts," and indeed to be *the* purposive element in life.

Coming to the special treatment of *human* behaviour, we have in the latter part of the book a further exhibition of the same principles. The standpoint is now "introspective," but every observation of any value must still lead back from conscious function to structure. Any form of unity or continuity in experience is to be traced to some conative disposition. Thus while we were told in Chapter V. that emotions are the true motives of action, we now find in Chapter IX. that feeling is secondary to striving. We note that McDougall now recognises (p. 349) the existence of "mixed feelings." In this section of the work we are introduced to the great questions of knowledge and morality. In bringing psychology to bear upon ethical questions McDougall largely reproduces the doctrines of his earlier works. There is the same characteristically medical outlook; in regard to character, a purely positive theory of self-development; as for conduct, a purely negative theory of moral effort. The ghosts of "egoism" and "altruism" walk. The "moral sentiment," developed from that of self-regard, is a "sentiment for sentiments" (all yet somehow standing to the "self" as attributes to substance.) The exercise of this acquired disposition is in the moral struggle, which is the usual squalid business. "Unless the angels are constituted very differently from ourselves, there must be more rejoicing in heaven over the life of one faithful pair of pigeons than over the human sinner who repents him of his vileness and cruelty." (p. 100). (Could one have a more concise self-refutation of psychological ethics than this?) We note that despite his rejection of the ideo-motor theory of action, McDougall still treats the question of "moral decision" on the lines of the Hobbes-James analysis, following it closely in his theory of moral freedom. In a different world, apparently, from moral struggles is the respectable "social behaviour" which springs from the positive "extension" of the sentiment of self-regard to cover "other" selves. Gifted souls, however, may dispense with both moral struggles and respectability and attain that lofty *insouciance* which is the moral ideal.

The account of cognition has some novel features. We shall be allowed to continue to speak of "ideas" if by that we are to mean cognitive dispositions. These are synthetic of the details of sense, though the synthesis does not appear to be a process that ever hap-

pens in experience. Actual cognition is simply a given mystery, whether it be the cognition of objects or of the "self." McDougall is clear on the distinction to be made between the sense-qualities of an object and the "sensations" with which they are regularly confused, the latter being only "introspective objects." It is the former that we know in perception. There is further a helpful discussion of Meaning, identifying it with the object. The general view taken of cognition is that all that is observable as cognitive process is the development of the conative tendency with which the cognitive tendency is "linked." The conative tendency it is which marks off reasoning from any form of mere association. If on the other hand we inquire after the reference to reality which seems to be a feature of cognitive process, we discover it is not available, for McDougall has already reduced reality to the feeling of resistance. Regard for truth is just one "sentiment" among others. A more adequate account of the reasoning process is given here than in the author's previous works. Reasoning is no longer viewed as merely the formal extraction of conclusions from given premises. It is now the exercise of "sagacity"; the selection of relevant premises. No apology is made to the oft-contemned "intellectualists" who have been developing this conception in logical theory while McDougall could see nothing in their work but the old formal doctrine; even now he is largely under the influence of the latter. Thus he continues to regard induction as being essentially a process of generalisation; the relevant features sagaciously selected are the various *instances* of the thing (p. 407), not the different *ways* of it. Inductive generalisation proper is that based on simple enumeration—"The world is so full of a number of things which do fall into natural classes" (p. 408.) Biology, it would appear, is the only genuine science, and in it Nature does our thinking for us. McDougall discusses at some length the problem of spatial perception, contrasting the nativistic and genetic theories, considering the problem as one of how much is to be allotted to the respective factors indicated by these, and advocating a "psychic stimulus" theory. The discussion is vitiated by the usual psychologist's confusion of the *a priori* with the hereditary.

In trying to escape the difficulties of mechanism within the "content of consciousness" psychologists have fallen back on the biological beginnings of their science, and taken for the subject of their study "natural individuality"—the particular organised body or Aristotelian "soul." They seek to discover the psycho-physical dispositions which are the structural basis of its functions. Now the clear suggestion of this book, despite the postponement of the Mind-Body problem, is that these psycho-physical dispositions of the organism are caused by an over-soul with corresponding purely "psychical" dispositions. In a curious passage (pp. 407-8) the author argues that while in "scientific induction" simple enumeration is eked out by certain categories or "working hypotheses" like identity and causality, what serves to give us a similar confidence in biological generalisations, which are purely inductive, is the fact that "Nature has grouped animals and plants in

species with easily recognisable distinctive marks." Now it is surely evident that there is a category at work here too—that of substance and attribute. The predominance of this category in his thinking it is which has brought about McDougall's failure to carry out thoroughly the modern view of reasoning. He assails, indeed, the customary procedure of explaining men's actions by "qualities" like courage, timidity, generosity, (pp. 215-7) instead of looking for their basis in the instincts, and gives this as an example of the peculiar vice of human thinking, the "reification" of abstractions. But the only reason vouchsafed for preferring the latter sort of explanation to the former is that conduct can never be understood in terms of any factor that cannot be found throughout the entire animal world. Which amounts simply to saying that the "qualities" in question are not inherent enough—are not true qualities—while the instincts are.

On these lines the ultimate problems of psychology indicated at the end of the book turn out to be those of whether or not there exist "innate ideas"—inborn tendencies to be interested in particular intellectual pursuits—and innate predispositions, beyond the instincts, to the growth of moral sentiments. Such will be dispositions of the pure *psyche*. Thus at its highest the work of psychology is the determination of differential heredity, which appears to be Professor McDougall's conception of the Absolute. Now is not such a "self" a mere duplicate of the "natural individuality" of the organisms, projected through the category of substance? McDougall does well to think of himself as the restorer of Cartesianism in psychology.

Modern biological psychology, it would appear, is dominated by a sort of psychological version of the *homoiomeria* of Anaxagoras. Clearly it involves quite as much in the way of hypothetical construction as anything achieved by physics or economics. One can only gasp when McDougall in his Introduction, for the purpose of inducing doubt of the validity of mechanism, cites the questionable state in which the traditional concepts of physical science—matter, energy, space, time, etc.—are found to-day, with Professor Eddington as witness. Is not the array of dispositions and tendencies in psychology just the kind of thing of which the other sciences are now ridding themselves. McDougall has, in fact, been too hasty in his repudiation of behaviourism. There are two behaviourisms. There is that which reduces human life to the operation of reflexes. But there is that also which is expressed in the words "A thing is what it does" or is doing, whose psychological application is found in the view of mind as pure act, and whose conditions the rejected associationist psychology made some attempt to satisfy. Now it is to mind as an activity that McDougall has to go in the first instance in order to get his "self"; it is in and of consciousness, namely an actual process, that alone one is compelled to postulate, as he does, a subject (and an object to boot.) But once he has got the subject he allows it to collapse into a subject of predicates, i.e., dispositions. The former standpoint, however, with which he had to start is precisely that at which function is prior to structure,

or at least to the subjective sort of structures *a tergo* with which McDougall's biological prepossessions constrain him to deal. The standpoint he reaches is the purely technological one of the outsider, for which structure is everywhere prior to function. The question at issue is the fundamental one of whether the conscious is part of the unconscious or the reverse. If we adopt the former alternative and make structure prior to function we are inevitably committed to mechanism however much we talk about purpose and distinguish instincts from reflexes. In any case it is clear that the distinction of mechanical processes from purposive is wrong. It sins against the author's basic distinction of structure and function. We should speak rather of processes whose purpose is apparent and those whose purpose is not.

The only possible "purposive" account of individuality is that, indicated by Kant, which exhibits man as a being who can only be understood as an end in himself and not as a means. Natural individuality is the negation of this. It seems that to get a "scientific" psychology we must rule out the infinity, community and continuity of mental life. Here as elsewhere, Push and Go means in practice Push and Stop.

—W. Anderson.

DIFFICULTIES. By Seymour Hicks. First Australian edition, Angus and Robertson. 1924. Pp. 272. Price 4/6.

"Difficulties," the author explains, is a more elaborate version of a previous little book entitled "If I Were Your Father," and is described as "an endeavour to be of some use to young men going into the world, who, as a rule, are left to find out for themselves things which have brought them to a cure, when a word might have helped them to prevention."

The motive is excellent, and Mr. Seymour Hicks proceeds in unconventional, confidential style, to talk as a man of the world to young men, on the snares and pitfalls that beset the path of youth. The appeal is not to the loftiest motives, but to "faith in the commonsense which is yours." The book is racily written and contains some good advice expressed in colloquial language, on such subjects as "Leaving Home," "Yourself," "Your Friends," "Gambling," "Drink," "Sex," etc. The first two most important, crucial subjects of which the author treats are "Religion" and "Sex." Speaking on the first of these, he warns the young against routine. "It is far better to think a short prayer in the street, than to murmur a long epistle unthinkingly in the church"; and "if you worship God, it doesn't matter whether you are a member of the Church of England, the Church of Rome, a hard-shelled Baptist, or of any faith." Don't laugh at the Bible "as a set of fairy tales, and don't listen without protest "to any who thus speak of it; and don't forget a little prayer of thanksgiving to your Maker at night." Don't "kick God out of your house," and don't lose faith in another life and the real presence of the departed who have started on

a fresh youth. There is no such place as Hell. Sin is paid for twice over before we die. But when you "board the train" you may find, as the result of your follies, that your arrival is "delayed." To be without religious belief is inconceivable.

On sexual dangers and marriage, some sound advice is proffered, but some counsel also is offered as to the *safe* gratification of sexual passions which will certainly not commend itself even to some young men or middle-aged women. The horrors of sexual disease descending to children's children, are rightly described, and the adoption of measures for its prevention and cure is urged. The writer has sounded the depth of infamy, and warnings as to "Blackmail," and traps set by designing men and women are very plainly given.

It may be doubted, however, whether these familiar talks with young men will persuade many to follow the author's well-meant advice. A real reformation of morals must have a deeper foundation in the family life, in the schools, and in economic changes which will cut the roots of wasteful luxury, idle wealth, gambling, and drunkenness, and promote early marriage and a social life worthy of human beings. The best of talk must be largely in vain so long as the necessary conditions of "a sober, righteous, and godly life" are disregarded and a low, selfish, and materialistic ideal dominates society. In neither of his analyses of the questions of Religion or Sex does the author rise above the level of the man in the street. There is no appeal to the higher nature of chivalrous, "generous youth," or to unselfish sense of responsibility as a man and a brother, and prospective parent. We cannot help feeling that this omission is a blot on the book.

—Charles Strong.

EINLEITUNG IN DIE MENGENLEHRE. By A. Fraenkel. 2 Aufl. 1923. *Die Grundlehren der mathematischen Wissenschaften in Einzeldarstellungen*. Bd. IX. (Springer, Berlin).

Much good work is being done in Germany in mathematics at the present time. The *Mathematische Zeitschrift*, founded in 1918, has already become one of the most important mathematical journals. Another evidence of activity is the series of text books of which this book forms the ninth volume. Edited by Courant of Göttingen, with the co-operation of his colleagues Runge and Born, and Blaschke of Hamburg, the appearance of its volumes is looked forward to by all Mathematicians; for the school of mathematics at Göttingen has a world-wide reputation. The author of this work (now a professor of mathematics at Marburg), served in the German army during the war. To pass the time in camp, he discussed with his comrades, non-mathematicians, the ideas which form the foundation of the theory of sets (the mathematician usually says *sets of points*). From these discussions this book arose. It was written in camp; and from the field it was sent to the press. It attempts to put the theory within the reach of the man in the street. It has defects arising from the circumstances

in which it was written, as well as corresponding advantages. But the author is to be congratulated on the extent to which he has been able to carry out his purpose.

One defect is the lack of adequate references to the literature of the subject. This the author himself recognises; but it seems a pity that more has not been done to remedy it, while revising and adding to the book for this new edition, which is meant to appeal to a wider public, and also to serve a purpose not originally proposed. The reader might well imagine that all the most important contributions to the subject had been made, and were still being made, in Germany. But the book also benefits from the way in which it arose. The men to whom the talks were given were not mathematicians. They were, we may suppose, mostly young men who in happier times would have passed from the Gymnasium to the University, institutions, both of which, occupy so notable a place in the life of Germany. It is a commonplace that, when we allow the infinitely great to enter into the argument (and the same is true of the infinitesimally small, witness the disputes of mathematicians and philosophers about the Infinitesimal Calculus in the 17th and 18th centuries) paradoxes follow, unless the path is suitably hedged by definitions and axioms. The theory of sets deals with aggregates containing an infinite number of elements. Its founder was Georg Cantor (1845-1918). The positive integers form such a set. The whole is not greater than the part, for there is a one-one correspondence between the set of positive integers and the set of even positive integers. In a sense there are as many even positive integers as even and odd positive integers. Again, take a triangle ABC with BC as base, and DE the middle points of the sides AB and AC . The line DE is parallel to BC and equal to half of BC . To every point P on DE there is a corresponding point Q on BC got by producing AP to cut BC in Q . We may thus say that there are as many points in DE as in a line double its size. Such are the paradoxes referred to above. To remove them clear thinking is required, and in the theory of sets such thinking is to be found. This theory has much to say about the idea of number, about the ordinal and cardinal numbers, about new numbers not dreamt of before its creation, e.g. the transfinite numbers. It is fundamental both in mathematics and in mathematical philosophy.

The mathematician will probably say that this would have been a better book if it had been more mathematical. The man in the street, even though he possess the qualifications the author demands, an interest in the infinite, and patience to follow step by step the somewhat abstract line of thought with which he deals, will no doubt say there is more mathematics in it than he wishes. It may be that for the philosopher there is just the proper amount. At any rate the first edition was rapidly exhausted in Germany, and I imagine its readers were mostly non-mathematicians; for the professional mathematician has other works on the subject more suited to his needs. But the fact that the new edition has been given a place in the series

of Göttingen treatises shows that the work has also been found useful by mathematicians: and it can certainly be recommended as a valuable introduction to an important and difficult subject.

—H. S. Carslaw.

ENQUÊTE SUR LES LIVRES SCOLAIRES D'APRÈS-GUERRE.

DOTATION CARNEGIE. Paris. 1923. 420 pp.

Cette étude de l'esprit scolaire d'après-guerre se recommande par des qualités de méthode patiente et précise, et par l'impartialité qui a présidé à sa compilation. La largeur d'esprit dont elle témoigne sera mise en lumière par la présence, au nombre des collaborateurs, des Professeurs Brockhaus (Vienne) et Ivanoff (Sofia).

Les auteurs ont lu et analysé environ 370 volumes, choisis parmi ceux qui sont les plus courants pour l'enseignement de l'histoire et de la morale civique, en Allemagne, en Angleterre, en Autriche, en Belgique, en Bulgarie, et en France. On regrette l'absence des Etats-Unis et du Japon. L'idée qui se dégage de ces études, c'est que, à de très rares exceptions près, "la démobilisation des esprits n'a pas suivi la démobilisation des armées"*) et que "l'école, qui devrait enseigner la vérité aux enfants, se contente souvent de leur enseigner la haine."†

On trouve dans ces pages des renseignements fort intéressants sur l'enseignement public en Europe, et particulièrement sur la Réforme de l'enseignement en Allemagne, par l'application de l'Article 148 de la Constitution de Weimar. La façon dont cet article est appliqué laisse quelques doutes sur l'application des autres articles.

L'Allemagne n'est pas la seule en cause. Certaines "histoires morales" à l'usage de la jeunesse des Ecoles françaises sont de douloureux exemples de l'absurdité de certains maîtres d'école: Telle est l'histoire héroïque du jeune patriote qui détruit à coups de marteau son chemin de fer mécanique, en découvrant qu'il est "made in Germany."

Doit-on enseigner aux élèves l'histoire de la Grande Guerre? Il serait inutile et peut-être dangereux de discuter ici cette question, car chacun a sur ce sujet des idées définies, et l'enseignement d'état, dans trop de pays, s'inspire plutôt de l'opinion des majorités parlementaires que des nécessités pédagogiques.

Cette dernière constatation, après tout, est de nature à consoler le philosophe, sinon le pacifiste. Le mal, quel qu'il soit, produit par un programme issu d'une Chambre réactionnaire sera suivi du mal contraire, dû au nouveau programme d'un gouvernement socialiste, et les enfants, devenus hommes, finiront, sous l'influence nouvelle de l'Université, de l'atelier, ou de leur journal quotidien, par se former une opinion nouvelle toute différente de celle que l'école aura cherché à leur imposer, à moins qu'ils ne conservent l'opinion de leur père ou de leur curé, ou qu'ils ne continuent à vivre sans aucune espèce d'opinion, ce qui est tout-à-fait possible, et parfaitement indifférent à Sirius.

—R. A. F. Andraud.

* formule de H. Lichtenberger, citée par M. Prudhommeaux.

† M. Prudhommeaux.

JOURNALS RECEIVED.

THE JOURNAL OF PHILOSOPHY. Edited by Professors Woodbridge and Bush, Columbia University. Published fortnightly. Four dollars per annum.

Vol. XXI. No. 14. July 3. Some Meanings of the Word "Is": G. Santayana. No. 15. July 17. Scientific Thought and Reality: H. C. Brown. No. 16. July 31. A Forgotten Service of Kant: M. C. Otto. Congrès International d'Histoire des Religions: S. P. Lamprecht. No. 17. August 14. Mental Development: F. J. E. Woodbridge. No. 18. August 28. A Monism of Creative Behaviour: O. L. Reiser. Towards Realistic Psychology: L. A. Reid. No. 19. Sept. 11. Ontological Argument *Redivivus*: Scott Buchanan. R. M. Blake, Sceptic: C. J. Ducasse. No. 20. Sept. 25. "More Things in Heaven and Earth": H. S. Parkhurst. Work as an Ethical Concept: T. V. Smith.

ARCHIVES DE PSYCHOLOGIE. Edited by Ed. Claparède. Geneva. No. 73. February, 1924. (London, Williams and Norgate).

Les Souvenirs Irréels: Pierre Janet. Les Centres Psychiques Sous-corticaux: F. Naville. L'Effet Dynamique des Sensations de Couleurs chez quelques Animaux: J. A. Bierens de Haan.

NOTES AND NEWS.

The Third General Meeting of the Australasian Association of Psychology and Philosophy will be held in Sydney University, in May, 1925. The Presidential Address will be delivered by Professor W. R. Boyce Gibson, Professor of Philosophy, University of Melbourne. Full details of the meeting will be published in the March number of the Journal.

At the fourth and fifth meetings of the Sydney Branch of the Association, papers were read on Psychology and Aesthetics, by Miss D. M. Rivett, M.A. (14th August), and on Personality Systems by Dr. A. H. Martin (9th October).

The following papers have been read at the monthly meetings of the Melbourne University Philosophical Society during the past year:—The Philosophy of Bergson, by Dr. S. C. Lazarus; Behaviouristic Psychology, by W. M. Ball; The Reality of Time, by Professor Gunn; The Concept of Intelligence in Modern Psychology, by K. S. Cunningham; The Psychology of Beauty, by G. Anderson; Symposium on the Ethics of William McDougall.

The American Philosophical Association has been authorised by the Permanent International Committee to convene the next International Congress of Philosophy in the United States. The Congress will be held during the second week of September, 1926, at one of the Eastern Universities. Fuller announcement will be made later, and invitations issued. Meanwhile, enquiries and correspondence may be addressed to the Corresponding Secretary, Professor J. J. Coss, Columbia University, New York.

